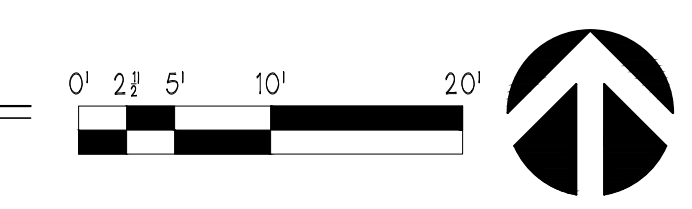


SITE PLAN
 SCALE 22X34 1" = 10'-0"
 SCALE 11X17 1" = 20'-0"



SHEET INDEX

- C1.1 SITE PLAN & PROJECT INFO
- C1.2 AVERAGE BUILDING ELEVATION
- A1.1 GENERAL NOTES & WINDOW & DOOR SCHEDULE
- A2.1 BASEMENT FLOOR PLANS
- A2.2 MAIN FLOOR PLANS
- A2.3 UPPER FLOOR PLANS
- A2.4 ROOF PLAN
- A3.1 ELEVATIONS
- A3.2 ELEVATIONS
- A4.1 BUILDING SECTIONS
- A4.2 BUILDING SECTIONS
- A4.3 BUILDING SECTIONS
- A5.1 ARCHITECTURAL DETAILS
- S-0.0 STRUCTURAL NOTES
- S-1.0 1ST FLOOR FRAMING PLAN
- S-2.0 2ND FLOOR FRAMING PLAN
- S-3.0 ROOF FRAMING PLAN
- LB-1 LATERAL BRACING DETAILS
- LB-2 LATERAL BRACING DETAILS

LEGEND

- PROPERTY LINE OF PROPOSED PROJECT
- PROPERTY LINE OF ADJACENT PROPERTIES
- CONTOUR LINE - 9' ELEVATION CHANGE DERIVED FROM KING COUNTY IMAP
- EXISTING MAIN LEVEL FOOTPRINT
- EXISTING UPPER LEVEL FOOTPRINT
- PROPOSED UPPER LEVEL ADDITION
- EXISTING ACCESSORY STRUCTURE
- CENTER LINE OF STREET
- EDGE OF CONCRETE
- ROOF OUTLINE
- PROPERTY SETBACK
- EASEMENT
- EXISTING TREES/FOLIAGE

AREA TABULATIONS

| | |
|----------------------------|-------------------|
| CONDITIONED SPACE | |
| BASEMENT LEVEL | 796 SQ-FT |
| MAIN FLOOR LEVEL | 1310 SQ-FT |
| UPPER FLOOR LEVEL | 1417 SQ-FT |
| TOTAL | 3523 SQ-FT |
| UNCONDITIONED SPACE | |
| DETACHED STORAGE UNIT | 99 SQ-FT |
| GARAGE | 548 SQ-FT |
| STORAGE + MECHANICAL | 143 SQ-FT |
| FRONT PORCH | 313 SQ-FT |
| REAR LOWER DECK | 216 SQ-FT |
| PROPOSED UPPER DECK | 33 SQ-FT |
| TOTAL | 1352 SQ-FT |
| TOTAL AREA | 4875 SQ-FT |

LANDSCAPING AREA

19.02.020.F.3 TABLE A.

| | |
|---|-------------------------------|
| MAIN DWELLING | 1839 SQ-FT |
| DRIVEWAY | 5725 SQ-FT |
| UNCOVERED PORCH | 37 SQ-FT |
| DETACHED STORAGE UNIT | 99 SQ-FT |
| CONC. STAIR | 33 SQ-FT |
| RETAINING WALLS | 34 SQ-FT |
| WALKWAY | 70 SQ-FT |
| TOTAL | 7837 SQ-FT |
| TOTAL LOT AREA | 17812 SQ-FT |
| | 7837 SQ-FT |
| TOTAL LANDSCAPING AREA | 9975 SQ-FT (UNCHANGED) |
| REQUIRED LANDSCAPING AREA = (17812 SQ-FT * 60% = 10687 SQ-FT) | |

LOT COVERAGE

19.02.020.F.3 TABLE A.

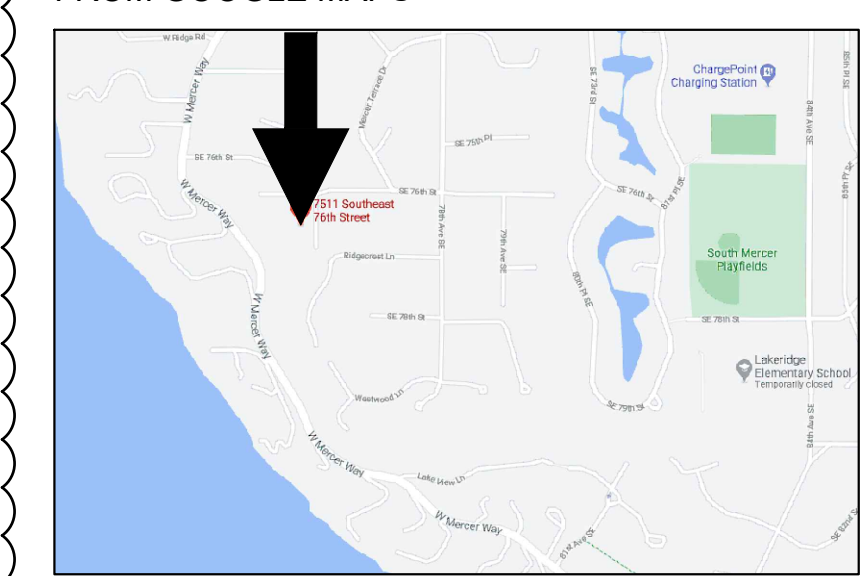
| | |
|-----------------------|--------------------|
| TOTAL LOT AREA | 17812 SQ-FT |
| DWELLING ROOF | 1956 SQ-FT |
| STORAGE UNIT | 99 SQ-FT |
| UNCOVERED PORCH | 37 SQ-FT |
| DRIVEWAY | 5725 SQ-FT |
| TOTAL | 7817 SQ-FT |

LOT SLOPE = CHANGE IN LOT DEPTH/CHANGE IN ELEVATION (137.24' / 15' = 9%)
 ALLOWED LOT COVERAGE = 17812 SQ-FT * 40% = 7125 SQ-FT
 PROPOSED LOT COVERAGE = 7817 SQ-FT (UNCHANGED)

GFA

| | |
|--------------------------|-------------------------------------|
| TOTAL LOT AREA | 17812 SQ-FT |
| BASEMENT LEVEL | |
| LIVING SPACE | 796 SQ-FT |
| STORAGE + MECHANICAL | 143 SQ-FT |
| GARAGE | 548 SQ-FT |
| TOTAL | 1487 SQ-FT |
| MAIN FLOOR LEVEL | |
| LIVING SPACE | 1310 SQ-FT |
| COVERED FRONT PORCH | 313 SQ-FT |
| COVERED REAR DECK | 216 SQ-FT |
| TOTAL | 1839 SQ-FT |
| UPPER FLOOR LEVEL | |
| LIVING SPACE | 1417 SQ-FT |
| COVERED REAR DECK | 33 SQ-FT |
| TOTAL | 1450 SQ-FT |
| TOTAL GFA | = 4776 SQ-FT |
| ALLOWED GFA | = 17812 SQ-FT * 40% = 7124.8 |

VICINITY MAP
FROM GOOGLE MAPS



PROJECT INFORMATION

| | |
|---------------|---------------|
| OWNER | AL SABER |
| JURISDICTION | MERCER ISLAND |
| PARCEL NUMBER | 812830-0020 |
| ZONING | R-15 |
| YEAR BUILT | 2006 |
| LOT AREA | 17812 SQ-FT |

PROJECT DESCRIPTION

INTERIOR ALTERATION TO AN EXISTING SFR WITH A 646 SQ-FT SECOND STORY ADDITION.

LEGAL DESCRIPTION

SUNSET CREST ADD
 PLAT BLOCK:
 PLAT LOT: 2

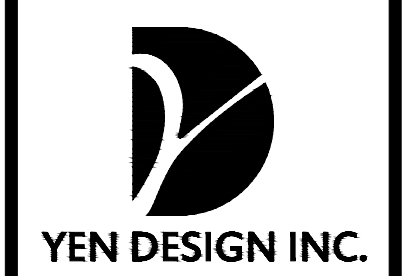
YARD CALCULATIONS

REAR YARD = 25'
 FRONT YARD = 20'
 SIDE YARD = 17% OF LOT WIDTH. LOT WIDTH = 111'
 111 X 0.17 = 18.87 10 + 8.87 = 18.87 TOTAL S.Y.S.

HEIGHT LIMIT

19.02.020. E.1.
 MAX BUILD HEIGHT = 30 FT ABOVE THE AVERAGE BUILDING ELEVATION TO THE HIGHEST POINT OF THE ROOF. NO INCREASE TO BUILDING HEIGHT IS PROPOSED.

| REV | DATE | DESCRIPTION |
|-----|----------|--------------------|
| 0 | 01.29.21 | PERMIT SUBMITTAL |
| 1 | 06.07.21 | CORRECTION CYCLE 1 |



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APPROVAL STAMP

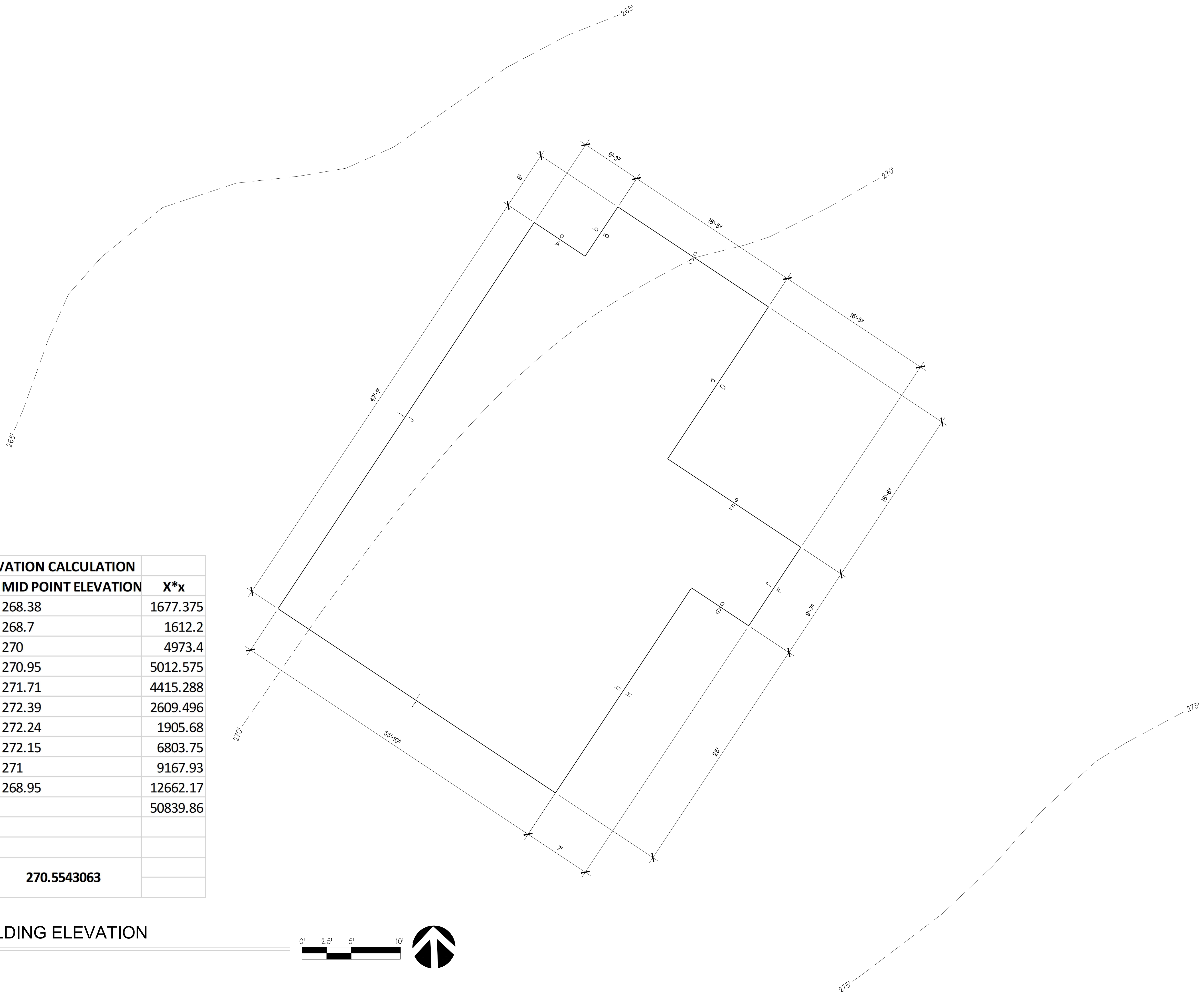
ENGINEER STAMP

A RESIDENTIAL REMODEL
7511 MERCER ISLAND
 AL SABER
 7511 SE 76TH ST
 MERCER ISLAND WA, 98040

SITE PLAN & PROJECT INFO

| | |
|------------|--------|
| JOB NO. | 20-207 |
| HALF SCALE | 11x17 |
| FULL SCALE | 22x34 |
| SHEET | |

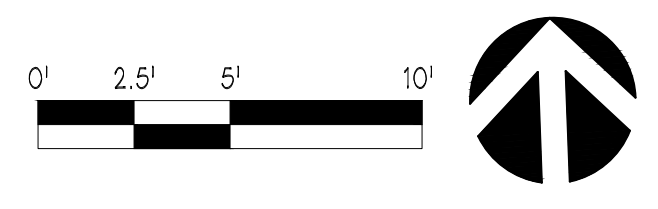
C1.1



| AVERAGE BUILDING ELEVATION CALCULATION | | |
|--|-----------------------------|----------------------|
| SEGMENT LENGTH | MID POINT ELEVATION | X*x |
| A = 6.25 | a = 268.38 | 1677.375 |
| B = 6 | b = 268.7 | 1612.2 |
| C = 18.42 | c = 270 | 4973.4 |
| D = 18.5 | d = 270.95 | 5012.575 |
| E = 16.25 | e = 271.71 | 4415.288 |
| F = 9.58 | f = 272.39 | 2609.496 |
| G = 7 | g = 272.24 | 1905.68 |
| H = 25 | h = 272.15 | 6803.75 |
| I = 33.83 | i = 271 | 9167.93 |
| J = 47.08 | j = 268.95 | 12662.17 |
| | | 50839.86 |
| | 187.91 | |
| Formula 1: | | |
| | $\frac{50839.8597}{187.91}$ | = 270.5543063 |

AVERAGE BUILDING ELEVATION

SCALE 22X34 1" = 10'-0"
SCALE 11X17 1" = 20'-0"



| REV | DATE | DESCRIPTION |
|-----|----------|--------------------|
| 0 | 01.29.21 | PERMIT SUBMITTAL |
| 1 | 06.07.21 | CORRECTION CYCLE 1 |



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ENGINEER STAMP

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7511 MERCER ISLAND
AL SABER
7511 SE 76TH ST
MERCER ISLAND WA, 98040

AVERAGE BUILDING ELEVATION

| | |
|------------|--------|
| JOB NO. | 20-207 |
| HALF SCALE | 11x17 |
| FULL SCALE | 22x34 |
| SHEET | |

C1.2

GENERAL NOTES

CONTRACTOR SHALL VERIFY ALL SITE CONDITIONS AND DIMENSIONS PRIOR TO COMMENCING THE WORK.

WORK SHALL COMPLY WITH THE FOLLOWING CODES:

2018 INTERNATIONAL RESIDENTIAL CODE

2018 WASHINGTON ENERGY CODE

OTHER CODES APPLICABLE TO JURISDICTION.



AIR SEALING:

- 1. ALL PLUMBING, ELECTRICAL, AND HVAC PENETRATIONS IN FLOOR, WALLS, AND CEILINGS ARE CAULKED AND SEALED.
2. WHERE PENETRATIONS NEED A FIRESTOP, DISCUSS WITH BUILDING OFFICIAL.
3. ELECTRICAL OUTLET AND LIGHT SWITCH BOXES ON EXTERIOR WALLS MUST BE SEALED AT THE BACK OF THE RECEPTACLE OR SEALED WITH FACEPLATE GASKETS.
4. SEAL RIM JOIST BETWEEN HEATED FLOORS OR USE PRODUCT LIKE "TYVEK" ON EXTERIOR.
5. VAPOR BARRIER SHALL BE EITHER FACE STAPLED BATTS, 4 MIL. VISOQUEEN OR AN APPROVED VAPOR BARRIER PAINT.

SEPARATION BETWEEN DWELLING AND GARAGE/CARPORT:

- a. NO SEPARATION REQUIRED IF ENTIRELY OPEN ON 2 OR MORE SIDES AND NO ENCLOSED USES. [OPEN DECKS ABOVE ARE OKAY. NON-RATED WALLS AND OPENABLE WINDOWS BETWEEN THE DWELLING AND CARPORT ARE OKAY].
b. MINIMUM 1/2" GWB ON GARAGE/CARPORT SIDE OF WALLS REQUIRED FOR ALL GARAGES/CARPORTS NOT COVERED BY 1A ABOVE.
c. 1-HOUR FIRE RATED WALL REQUIRED IF LESS THAN 5 FEET FROM PROPERTY LINE (NO OPENINGS ALLOWED LESS THAN 3' FROM PROPERTY LINE, 25% MAXIMUM OPENINGS BETWEEN 3' AND 5' TO PROPERTY LINE) OVERHANGS MUST BE A MINIMUM 2' FROM PROPERTY LINE, EXCEPT STEEL GUTTER ALLOWED CLOSER AND 5/8" GWB SHEATHING REQUIRED ON UNDERSIDE WHEN 5' OR LESS FROM PROPERTY LINE.

EGRESS WINDOWS: REQUIRED FOR 1 WINDOW/BEDROOM OR SLEEPING AREA [BELOW 4TH FLOOR] AND 1 WINDOW/BASEMENT.

- a. MIN. NET CLEAR AREA = 5.7 SQ. FT., [MIN. 3'0" x 4'6" IF DOUBLE HUNG OR 4'0" x 3'6" WINDOW IF SLIDER], 5.0 SQ. FT. IF SILL HEIGHT IS WITHIN 44" OF GRADE [ABOVE OR BELOW].
b. MIN. NET CLEAR OPENING WIDTH = 20"; MIN. NET CLEAR OPENING HEIGHT = 24"
c. MAX. SILL HEIGHT = 44"

REQUIRED GLAZING FOR HABITABLE ROOMS:

- a. MIN. GLAZED EXTERIOR OPENING AREA = 8% OF FLOOR AREA.
b. GLAZED OPENINGS NOT REQUIRED WHERE PERMANENTLY INSTALLED ARTIFICIAL LIGHT IS PROVIDED.
c. OK IF OPENINGS ARE BELOW DECK & ROOFED PORCHES w/MIN. CEILING HEIGHT OF 7 FT. [LONG SIDE 65% OPEN].

MECHANICAL/VENTILATION: REQUIRED FOR HABITABLE ROOMS OF ADDITIONS AND ALTERATIONS MORE THAN 500 SQ. FT. OR THAT INCLUDE A KITCHEN, BATHROOM, AND OTHER AREAS WHERE COOKING ODOOR OR EXCESS WATER VAPOR WILL BE PRODUCED.

- a. MIN. 50 CFM FOR BATHROOM AND LAUNDRY; MIN. 100 CFM FOR KITCHEN.
b. MIN. AIR INTAKE OPENINGS = 4 SQ. IN. PER ROOM.
c. WHOLE HOUSE FAN MUST OPERATE AS SPECIFIED IN IRC M1505.4

SMOKE ALARMS: REQUIRED INSIDE AND OUTSIDE OF SLEEPING AREAS AND ON ALL FLOORS. DIRECT WIRING IS REQUIRED FOR SMOKE DETECTORS, UNLESS REMOVAL OF INTERIOR WALL OR CEILING FINISHES IS NECESSARY TO INSTALL THE WIRING.

CARBON MONOXIDE ALARMS: REQUIRED OUTSIDE SLEEPING AREAS AND ON ALL FLOORS, UNLESS WORK ONLY INVOLVES EXTERIOR SURFACES OF THE BUILDING.

STAIR REQUIREMENTS: [APPLIES TO ALL R-3 STAIRS AND R-2 PRIVATE STAIRWAYS]:

- a. MIN. WIDTH = 36"
b. MAX. HEIGHT/RISE = 7-3/4"; MIN. TREAD RUN = 10"
c. MIN. HEADROOM = 6'8"
d. HANDRAIL 34"-38" ABOVE TREAD NOSING [RETURN ENDS]
e. HANDRAIL GRASP DIMENSION: MIN. 1-1/4", MAX. 2"
f. WINDING STAIRS:
1. MIN. TREAD RUN AT NARROWEST POINT = 6"
2. MIN. TREAD RUN 12" FROM NAORROWEST POINT = 10"
g. SPIRAL STAIRS:
1. MIN. CLEAR WALKING AREA WIDTH = 26"
2. MIN. TREAD RUN 12" FROM NARROWEST POINT = 7-1/2" / MAX. RISER HEIGHT = 9-1/2"
3. MIN. HEADROOM = 6'6"

CEILING HEIGHT IN ADDITIONS AND ALTERATIONS:

- a. MIN. 7'0". FOR NEW CONSTRUCTION OR ADDITIONS
b. ROOMS WITH SLOPED CEILINGS REQUIRE MINIMUM CEILING HEIGHT IN 1/2 OF THE AREA. [PORTIONS OF THE ROOM WITH CEILING HEIGHT LESS THAN 5 FT. DO NOT COUNT IN TOTAL AREA].

INSULATION:

- 1. FACED BATTS ARE LAPPED AND FACE STAPLED AT FRAMING MEMBERS.
2. ALL EXTERIOR WALL CAVITIES ARE FILLED WITH UNCOMPRESSED INSULATION, INCLUDING ALL CAVITIES ISOLATED DURING FRAMING, WIRING, AND PLUMBING.
3. ALL RECESSED FIXTURES IN EXTERIOR WALLS HAVE RIGID BOARD INSULATION BEHIND THEM.
4. UNDERFLOOR INSULATION IS SUPPORTED BY LATH, TWINE, OR OTHER NON-COMPRESSING MEANS.
5. ATTIC ACCESS IS BAFFLED, WEATHER-STRIPPED AND INSULATED.

FOUNDATION LOCATION: PROPERTY CORNERS MUST BE ACCURATELY DETERMINED AND INDICATED ON SITE FOR FOUNDATION INSPECTION. A SURVEY MAY BE REQUIRED. FENCE LOCATIONS WILL NOT BE ACCEPTED AS ESTABLISHING PROPERTY CORNERS.

OTHER REQUIREMENTS:

- a. GUARDRAILS: MIN 36" HT. MUST BE LESS THAN 4" SPACING BETWEEN INTERMEDIATE MEMBERS [42" MIN. HT. FOR R-2 EXTERIOR].
b. FLOORINGS: BOTTOM MIN. 12" ABOVE EXPOSED GROUND IN CRAWL SPACE, TOP OF FOUNDATION WALL MIN. 6" ABOVE GRADE.
c. CONCRETE SLABS ON GRADE: 3-1/2" MIN. THICKNESSES.
d. PIER BLOCKS: MIN. 12" X 12" SIZE, RESTING ON CONCRETE PAD MIN. 12" BELOW GRADE.
e. FOUNDATION WALLS: PROVIDE ONE (1) #4 REBAR TOP AND BOTTOM AND AT ALL WINDOWS/DOOR OPENINGS. LIMIT 4' MAX. BACKFILL. FOUNDATION ANCHOR BOLTS: MIN. 1/2" x 10", 6 FT. ON CENTER MAX. WITH TWO (2) BOLTS PER PIECE OF PLATE AND AT LEAST ONE (1) BOLT WITH 12" AT END OF EACH PIECE [REQUIRED FOR NEW CONSTRUCTION].
g. ALL STRUCTURAL SOFTWOOD PLYWOOD, PARTICLE BOARD, WAFER BOARD, AND OSB BOARD ARE STAMPLED WITH EXPOSURE "1" OR EXTERIOR!
h. WATER HEATER STORAGE TANK LABELED AS MEETING 1987 NAT'L APPLIANCE ENERGY CONSERVATION ACT. ASHRAE STANDARD 90A-1980 INSULATION TO R-16 OR R-10 PAD IF LOCATED OVER UNINSULATED SLAB.
i. INSULATE HOT AND COLD WATER PIPES TO R-3 IN UNHEATED AREAS. [INSULATION FOR HOT WATER PIPE, BOTH WITHIN AND OUTSIDE CONDITIONED SPACE, SHALL HAVE A MIN R-VALUE OF R-3 PER WSEC R403.5.3]
j. SHOWER REGULATOR TO LIMIT HOT WATER DISCHARGE TO 2.5 GPM
k. WOODSTOVES AND FIREPLACES HAVE TIGHT FITTING DOORS, OUTSIDE COMBUSTION AIR DUCTED TO FIREBOX WITH ACCESSIBLE DAMPER, MIN 6 SQ IN FREE VENT AREA. TIGHT FITTING FLUE DAMPERS REQ'D.
l. ALL GAS AND OIL COMBUSTION APPLIANCES HAVE A DIRECT VENT OR FORCED DRAFT VENTING.
m. RECESSED LIGHTS ARE I.C. RATED, DOUBLE WALL CAN LIGHTS OR WITHIN SEALED WPGWB BOX-IN.
n. CONTRACTOR TO PROVIDE (1) 16"x24" MINIMUM CRAWL SPACE ACCESS INTO NEW CRAWL SPACE AREA THAT IS ACCESSIBLE FROM EITHER THE OUTSIDE OR FROM THE EXISTING CRAWLSPACE AREA. OTHERWISE CONTRACTOR IS TO PROVIDE (1) 18"x24" MINIMUM CRAWL SPACE ENTRANCE THROUGH MAIN LEVEL FLOOR FRAMING THAT ACCESSES NEW CRAWL SPACE AREA.
o. A CERTIFICATE IS REQUIRED TO BE POSTED WITHIN 3' OF THE ELECTRICAL PANEL PER WSEC R401.3 AND INCLUDE THE FOLLOWING: PREDOMINATE R-VALUES, U-VALUES OF FENESTRATION, RESULTS FROM DUCT SYSTEM AND BUILDING ENVELOPE AIR LEAKAGE TESTING, AND EFFICIENCIES OF HEATING/COOLING/WATER HEATING EQUIPMENT.
p. A MIN OF 90 PERCENT OF PERMANENTLY INSTALLED LAMPS IN INTERIOR AND EXTERIOR LIGHTING FIXTURES MUST BE HIGH-EFFICIENCY LAMPS PER WSEC R404.1

INSULATION

INSULATION AND FENESTRATION REQUIREMENTS R402.1.1

Table with 2 columns: CLIMATE ZONE and 5 AND MARINE-4. Rows include FENESTRATION U-FACTOR (k), SKYLIGHT U-FACTOR (kl), GLAZED FENESTRATION SHGC (bp), CEILING R-VALUE (k), WOOD FRAME WALL R-VALUE (l), MASS WALL R-VALUE (d), FLOOR R-VALUE, BELOW-GRADE WALL R-VALUE (lp), and SLAB R-VALUE & DEPTH (lq).

FOR SI: 1 FOOT = 304.8 MM, C1 = CONTINUOUS INSULATION, INT = INTERMEDIATE FRAMING.

- a. R-VALUES ARE MINIMUMS. U-FACTORS AND SHGC ARE MAXIMUMS. WHEN INSULATION IS INSTALLED IN A CAVITY WHICH IS LESS THAN THE LABEL OR DESIGN THICKNESS OF THE INSULATION, THE COMPRESSED R-VALUE OF THE INSULATION FROM APPENDIX TABLE A101.4 SHALL NOT BE LESS THAN THE R-VALUE SPECIFIED IN THE TABLE.
b. THE FENESTRATION U-FACTOR COLUMN EXCLUDES SKYLIGHTS. THE SHGC COLUMN APPLIES TO ALL GLAZED FENESTRATION.
c. "10/15/21 +TB" MEANS R-10 CONTINUOUS INSULATION ON THE EXTERIOR OF THE WALL, OR R-15 CONTINUOUS INSULATION ON THE INTERIOR OF THE WALL, OR R-21 CAVITY INSULATION PLUS A THERMAL BREAK BETWEEN THE SLAB AND THE BASEMENT WALL AT THE INTERIOR OF THE BASEMENT WALL. "10/15/21 +TB" SHALL BE PERMITTED TO BE MET WITH R-13 CAVITY INSULATION ON THE INTERIOR OF THE BASEMENT WALL PLUS R-5 CONTINUOUS INSULATION ON THE INTERIOR OR EXTERIOR OF THE WALL. "TB" MEANS THERMAL BREAK BETWEEN FLOOR SLAB AND BASEMENT WALL.
d. R-10 CONTINUOUS INSULATION IS REQUIRED UNDER HEATED SLAB ON GRADE FLOORS. SEE R402.2.9.1.
e. THERE ARE NO SHGC REQUIREMENTS IN THE MARINE ZONE.
f. RESERVED.
g. RESERVED.
h. RESERVED.
i. THE SECOND R-VALUE APPLIES WHEN MORE THAN HALF THE INSULATION IS ON THE INTERIOR OF THE MASS WALL.
j. RESERVED.
k. FOR SINGLE RAFTER- OR JOIST-VAULTED CEILINGS, THE INSULATION MAY BE REDUCED TO R-38.

- m. INT. [INTERMEDIATE FRAMING] DENOTES STANDARD FRAMING 16 INCHES ON CENTER WITH HEADERS INSULATED WITH A MINIMUM OF R-10 INSULATION.
n. LOG AND SOLID TIMBER WALLS WITH A MINIMUM AVERAGE THICKNESS OF 3.5 INCHES ARE EXEMPT FROM THIS INSULATION REQUIREMENT.
o. WHERE EXISTING FRAMING CAVITIES ARE EXPOSED DURING CONSTRUCTION, THE CAVITIES MUST BE FILLED TO FULL DEPTH WITH BATT INSULATION OR INSULATION HAVING AN EQUIVALENT NOMINAL R-VALUE OF R-15 AT 2x4 WALLS OR R-21 AT 2x6 WALLS PER WSEC 503.1.1

MECHANICAL/VENTILATION

Table: LOCAL EXHAUST REQUIREMENTS M1505.4.4. Columns: AREAS TO BE EXHAUSTED, EXHAUST RATES. Rows: KITCHENS, BATHROOMS/TOILET ROOMS, LAUNDRY ROOMS, INDOOR SWIMMING POOL ROOMS, SPA ROOMS.

CONTINUOUS WHOLE-HOUSE MECHANICAL VENTILATION SYSTEM AIRFLOW RATE REQUIREMENTS M1505.4.3(1)

Table: CONTINUOUS WHOLE-HOUSE MECHANICAL VENTILATION SYSTEM AIRFLOW RATE REQUIREMENTS M1505.4.3(1). Columns: DWELLING UNIT FLOOR AREA (SQ. FEET), NUMBER OF BEDROOMS (0-1, 2-3, 4-5, 6-7, >7), AIRFLOW IN CFM (<1500, 1501-3000, 3001-4500, 4501-6000, 6001-7500, >7501).

INTERMITTENT WHOLE-HOUSE MECHANICAL VENTILATION RATE FACTORS M1505.4.3(2)

Table: INTERMITTENT WHOLE-HOUSE MECHANICAL VENTILATION RATE FACTORS M1505.4.3(2). Columns: RUN-TIME PERCENTAGE IN EACH 4-HOUR SEGMENT (25%, 33%, 50%, 66%, 75%, 100%), FACTOR (4, 3, 2, 1.5, 1.3, 1.0).

BATHROOMS, TOILET ROOMS, AND KITCHENS SHALL INCLUDE A LOCAL EXHAUST SYSTEM. SUCH LOCAL EXHAUST SYSTEMS SHALL HAVE THE CAPACITY TO EXHAUST THE MINIMUM AIRFLOW RATE IN ACCORDANCE WITH TABLE M1505.4.4(1). FANS REQUIRED BY THIS SECTION SHALL BE PROVIDED WITH CONTROLS THAT ENABLE MANUAL OVERRIDE OR AUTOMATIC OCCUPANCY SENSOR, HUMIDITY SENSOR OR POLLUTANT SENSOR CONTROLS. AN "ON/OFF" SWITCH SHALL MEET THIS REQUIREMENT FOR MANUAL CONTROLS. MANUAL FAN CONTROLS SHALL BE READILY ACCESSIBLE IN THE ROOM SERVED BY THE FAN.

- 1. EXHAUST FANS SHALL MEET THE FOLLOWING CRITERIA:
- EXHAUST FANS SHALL BE TESTED AND RATED IN ACCORDANCE WITH THE AIRFLOW AND SOUND RATING PROCEDURES OF THE HOME VENTILATING INSTITUTE [HVI 915, HVI LOUDNESS TESTING AND RATING PROCEDURE; HVI 916, HVI AIRFLOW TEST PROCEDURE; AND HVI 920, HVI PRODUCT PERFORMANCE CERTIFICATION PROCEDURE]. EXCEPTION: WHERE A RANGE HOOD OR DOWN DRAFT EXHAUST FAN IS USED FOR LOCAL EXHAUST FOR A KITCHEN, THE DEVICE IS NOT REQUIRED TO BE RATED PER THESE STANDARDS.
- FAN AIRFLOW RATING AND DUCT SYSTEM SHALL BE DESIGNED AND INSTALLED TO DELIVER AT LEAST THE EXHAUST AIRFLOW REQUIRED BY TABLE M1505.4.4(1). THE AIRFLOWS REQUIRED REFER TO THE DELIVERED AIRFLOW OF THE SYSTEM AS INSTALLED AND TESTED USING A FLOW HOOD, FLOW GRID, OR OTHER AIRFLOW MEASUREMENT DEVICE. LOCAL EXHAUST SYSTEMS SHALL BE TESTED, BALANCED AND VERIFIED TO PROVIDE A FLOW RATE NOT LESS THAN THE MINIMUM REQUIRED BY THIS SECTION.
- DESIGN AND INSTALLATION OF THE SYSTEM OR EQUIPMENT SHALL BE CARRIED OUT IN ACCORDANCE WITH THE MANUFACTURER'S INSTALLATION INSTRUCTIONS.
- FAN AIRFLOW RATING AND DUCT SYSTEM SHALL BE DESIGNED AND INSTALLED TO DELIVER AT LEAST THE EXHAUST AIRFLOW REQUIRED BY TABLE M1505.4.4(1).
2. WHOLE-HOUSE VENTILATION USING EXHAUST FANS MUST COMPLY WITH:
- IRC M1505.4: EACH DWELLING UNIT SHALL BE EQUIPPED WITH A VENTILATION SYSTEM. THE WHOLE-HOUSE MECHANICAL VENTILATION SYSTEMS SHALL BE DESIGNED IN ACCORDANCE WITH SECTIONS M1505.4.1 THROUGH M1505.4.4.
- WHOLE-HOUSE VENTILATION FANS SHALL BE RATED FOR SOUND AT NO LESS THAN THE MINIMUM AIRFLOW RATE REQUIRED BY SECTION M1505.4.3.1. VENTILATION FANS SHALL BE RATED FOR SOUND AT A MAXIMUM OF 1.0 SONE. THIS SOUND RATING SHALL BE AT A MINIMUM OF 0.1 IN. W.C. [25 PA] STATIC PRESSURE IN ACCORDANCE WITH HVI PROCEDURES SPECIFIED IN SECTIONS M1505.4.1.2 AND M1505.4.1.3.
3. DUCTS MUST BE LEAK TESTED IN ACCORDANCE WITH W5U R9-33 USING THE MAXIMUM DUCT LEAKAGE RATES SPECIFIED. DUCT TIGHTNESS MUST BE VERIFIED BY EITHER A POST-CONSTRUCTION TEST OR ROUGH - IN TEST PER WSEC R403.5.3. TOTAL LEAKAGE MUST BE LESS THAN OR EQUAL TO 4 CFM PER 100 SQ-FT OF CONDITIONED FLOOR AREA WHEN TESTED AT A PRESSURE DIFFERENTIAL OF 0.1" W.G. [25 PA] ACROSS THE ENTIRE SYSTEM.

4. PER IRC M1503.6, WHERE ONE OR MORE GAS, LIQUID OR SOLID FUEL-BURNING APPLIANCE THAT IS NEITHER DIRECT-VENT NOR USES A MECHANICAL DRAFT VENTING SYSTEM IS LOCATED WITHIN A DWELLING UNIT'S AIR BARRIER, EACH EXHAUST SYSTEM CAPABLE OF EXHAUSTING IN EXCESS OF 400 CUBIC FEET PER MINUTE [0.19 M3/S] SHALL BE MECHANICALLY OR PASSIVELY PROVIDED WITH MAKEUP AIR AT A RATE APPROXIMATELY EQUAL TO THE EXHAUST AIR RATE. SUCH MAKEUP AIR SYSTEMS SHALL BE EQUIPPED WITH NOT FEWER THAN ONE DAMPER COMPLYING WITH SECTION M1503.6.2.
5. WHERE A CLOSET IS DESIGNED FOR THE INSTALLATION OF A CLOTHES DRYER, AN OPENING HAVING AN AREA OF NOT LESS THAN 100 SQ. INCHES SHALL BE PROVIDED IN THE CLOSET ENCLOSURE OR MAKEUP AIR SHALL BE PROVIDED BY OTHER APPROVED MEANS PER SMC 504.6.

Vertical Fenestration (Windows and doors)

Table: Vertical Fenestration (Windows and doors). Columns: Component, Description, Ref., U-factor. Rows: D1 - SOLID, W1 - C - EGRESS, W2 - XO, W3 - SH, W4 - SH, W5 - SH, W6 - SH, W7 - SH - EGRESS, W8 - SH - EGRESS - SAFETY, W9 - SH - EGRESS, W10 - SH, W11 - SH, W12 - SH, W13 - SH, W14 - SH - OPAQUE - SAFETY, W15 - SH - OPAQUE, W16 - SH - OPAQUE, W17 - SH, W18 - SH.

ACTUAL SIZE

Table: ACTUAL SIZE. Columns: Width (Qt., Feet, Inch), Height (Feet, Inch), Sill (Feet, Inch), Area, UA. Rows: 1 2 8 6 8 0 0, 1 3 0 3 6 3 8, 1 5 0 2 0 5 6, 1 2 10 5 0 3 6, 2 3 1 4 6 2 6, 1 2 10 5 0 3 6, 2 2 10 5 0 3 6, 2 5 0 6 0 2 6, 1 4 0 4 8 2 6, 2 4 0 6 0 2 6, 2 2 0 4 0 2 6, 1 3 6 4 0 3 6, 1 3 0 5 6 3 0, 2 2 0 3 0 5 6, 1 2 10 3 0 4 6, 1 2 10 3 0 4 6, 1 2 10 3 0 4 6, 1 4 0 4 0 2 6.

Sum of Vertical Fenestration Area and UA

Table with 2 columns: 357.9, 107.36

Vertical Fenestration Area Weighted U = UA/Area

Table with 2 columns: 0.30

WINDOW & DOOR SCHEDULE NOTES:

- 1. XO = SLIDER, SH = SINGLE HUNG, DH = DOUBLE HUNG, FIX = PICTURE, C = CASEMENT
2. IF CONTRACTOR DECIDES TO REPLACE WINDOWS, THEY MUST MEET ENERGY PERFORMANCE STANDARDS, HEAT TREATMENT REQUIREMENTS AND EGRESS.
3. ALL WINDOWS SHALL BE NFRC CERTIFIED.
4. CONTRACTOR TO VERIFY EGRESS AND HEAT TREATMENT REQUIREMENTS WITH WINDOW & DOOR MANUFACTURER.
5. EGRESS WINDOWS SIZED FOR "MILGARD STYLE LINE" SERIES WINDOWS. CONTRACTOR TO VERIFY EGRESS REQUIREMENTS IF A DIFFERENT MANUFACTURER / MODEL IS CHOSEN.

WASHINGTON STATE ENERGY CREDIT CALCULATION:

- 1. 1162 SF OF NEW HEATED FLOOR AREA. 3 CREDITS REQ'D.

ENERGY CREDITS CHOSEN:

- 2.3: AIR LEAKAGE CONTROL AND EFFICIENT VENTILATION: 15 PTS COMPLIANCE BASED ON SECTION R402.4.1.2: REDUCE THE TESTED AIR LEAKAGE TO 1.5 AIR CHANGES PER HOUR MAXIMUM AT 50 PASCALS & ALL WHOLE HOUSE VENTILATION REQUIREMENTS AS DETERMINED BY SECTION M1507.3 OF THE INTERNATIONAL RESIDENTIAL CODE OR SECTION 403.8 OF THE INTERNATIONAL MECHANICAL CODE SHALL BE MET WITH A HEAT RECOVERY VENTILATION SYSTEM WITH MINIMUM SENSIBLE HEAT RECOVERY EFFICIENCY OF 0.75.
5.3: EFFICIENT WATER HEATING: 10 PTS ENERGY STAR RATED GAS OR PROPANE WATER HEATER WITH A MINIMUM UEF OF 0.91.
7.1: APPLIANCE PACKAGE: 0.5 PTS. ALL OF THE FOLLOWING APPLIANCES SHALL BE NEW AND INSTALLED IN THE DWELLING UNIT AND SHALL MEET THE FOLLOWING STANDARDS:
DISHWASHER - ENERGY STAR RATED
REFRIGERATOR [IF PROVIDED] - ENERGY STAR RATED
WASHING MACHINE - ENERGY STAR RATED
DRYER - ENERGY STAR RATED, VENTLESS DRYER WITH A MINIMUM CEF RATING OF 5.2.

Table: REV, DATE, DESCRIPTION, PERMIT SUBMITTAL, CORRECTION CYCLE 1. Rows: 0, 01.29.21, 1, 06.07.21.



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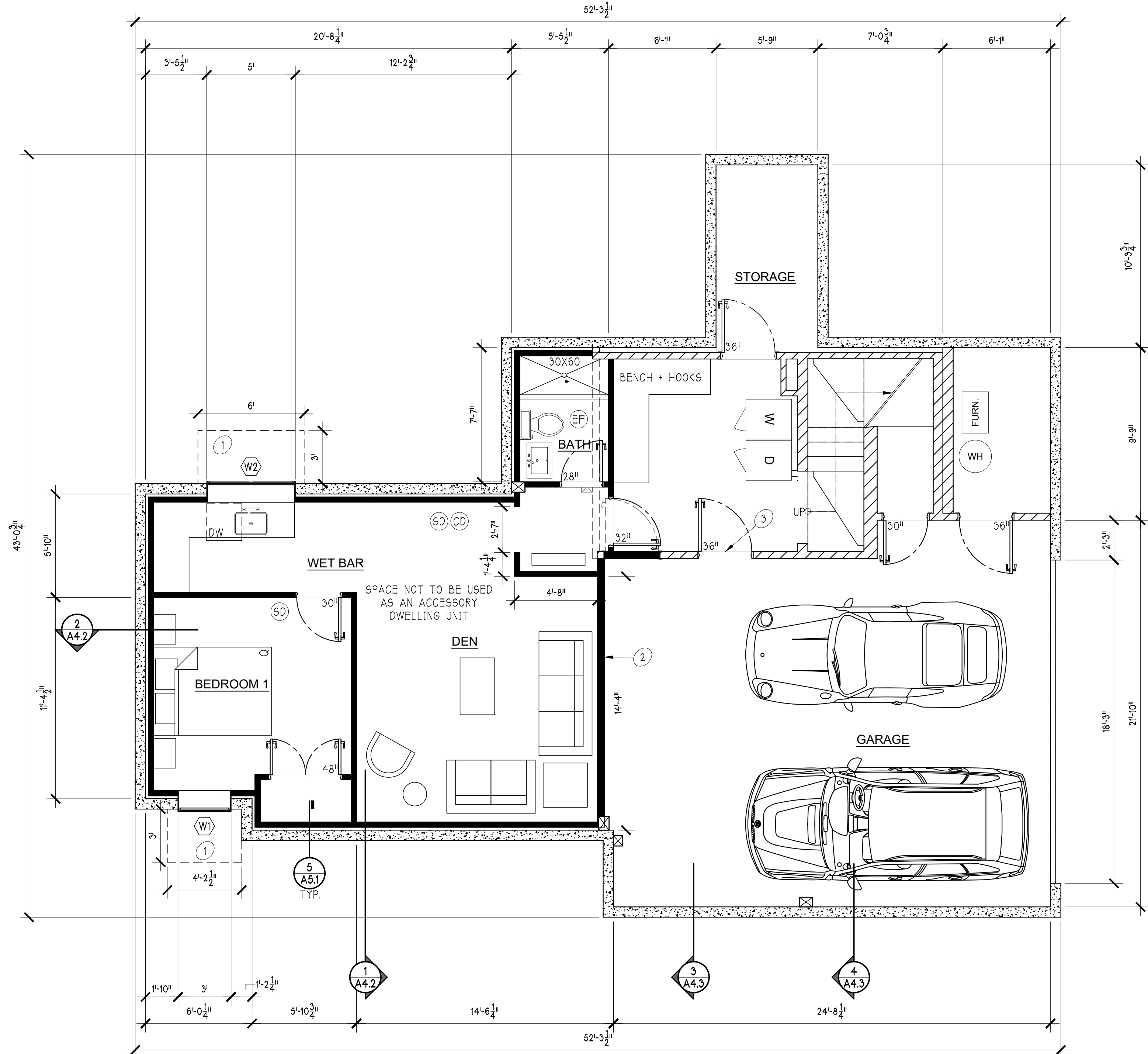
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GENERAL NOTES & WINDOW & DOOR SCHEDULE

Table: JOB NO. 20-207, HALF SCALE 11x17, FULL SCALE 22x34, SHEET

A1.1



PLAN KEYNOTES

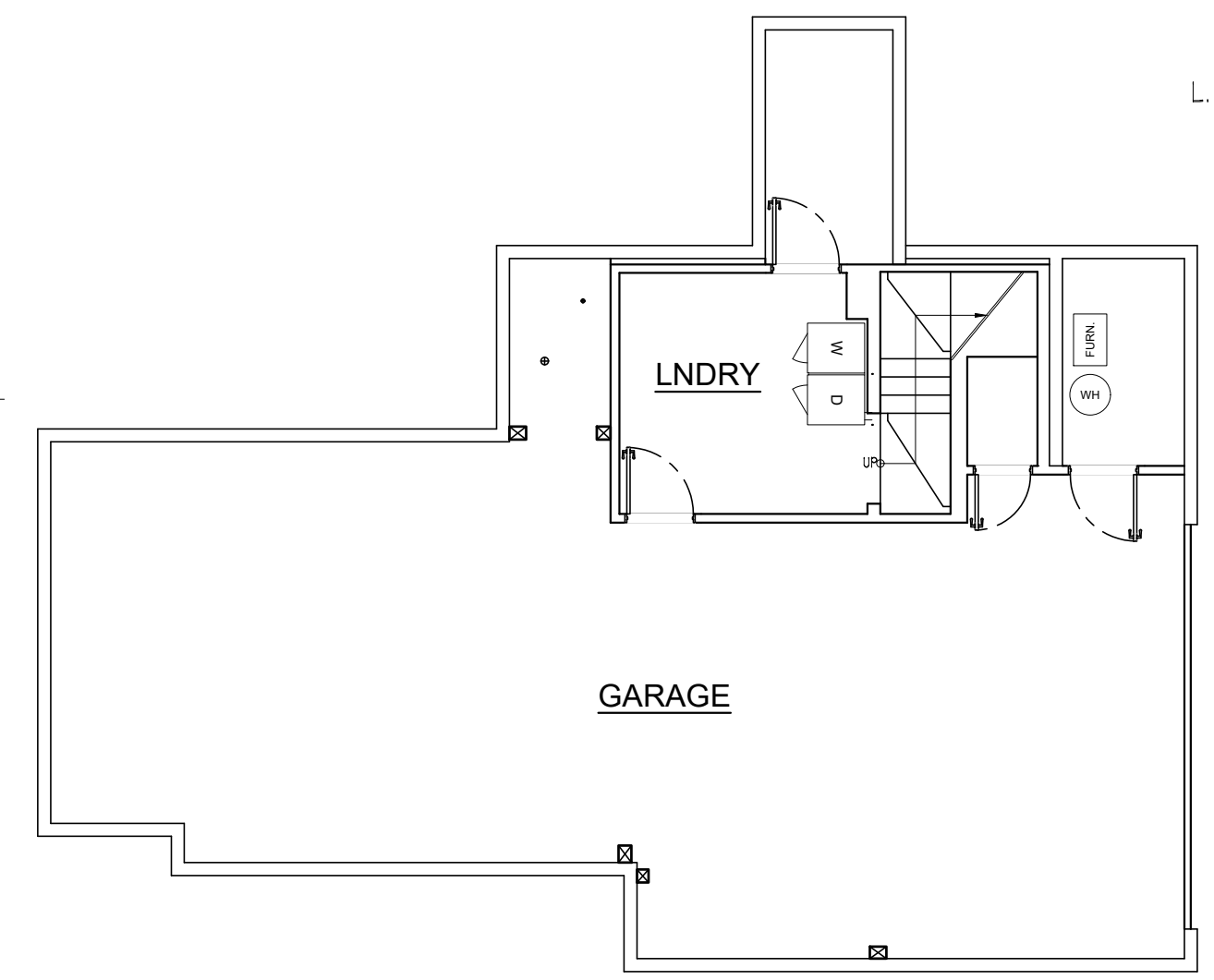
1. NEW WINDOW WELL PER **2/A4.1** FOR WINDOW WELLS SERVING EGRESS WINDOW, WITH A DEPTH GREATER THAN 44", PROVIDE LADDER PER R310.2.3.1.
2. PROVIDE 5/8" TYPE X GYPSUM WALL BOARD ON ALL WOOD WALLS/CEILINGS THAT SEPARATE GARAGE FROM LIVING SPACE.
3. DOOR TO BE 1-3/8" SOLID-CORE WOOD, 1-3/8" SOLID OR HONEYCOMB STEEL, OR 20 MIN. RATED DOOR WITH A SELF-CLOSING DEVICE. SEE SHEET **A11** FOR ADDITIONAL REQUIREMENT ON SEPARATION BETWEEN DWELLING AND GARAGE.

LEGEND

- NEW STUD WALL. SEE **1/A5.1** FOR FRAMING INFO.
- EXISTING WALL TO REMAIN
- DEMOLISHED WALLS
- SMOKE DETECTOR
- INDICATES REFERENCE TO KEYNOTES SEE KEYNOTES ON THIS SHEET FOR BALANCE OF INFORMATION
- CARBON MONOXIDE DETECTOR WITH BATTERY BACKUP.
- EXHAUST FAN (INTERMITTENT) 50 CFM UN.O.
- SEE DOOR AND WINDOW SCHEDULE ON SHEET **A11** FOR DETAILED INFO. SEE **2/A5.1** & **3/A5.1** FOR FRAMING INFO.

GENERAL NOTES

- PLANS MUST BE APPROVED BY THE GOVERNING BUILDING OFFICIAL OR PROFESSIONAL ENGINEER PRIOR TO WORK COMMENCING.
- CONTRACTOR TO VERIFY ALL STRUCTURAL LOAD PATHS AND EXISTING SHEAR / BRACED WALL LOCATIONS BEFORE REMOVING ANY WALLS. STRUCTURAL DEVIATIONS FROM THE PLAN SHOULD BE VERIFIED BY A STRUCTURAL ENGINEER OR BUILDING INSPECTOR. YEN DESIGN IS TO BE CONTACTED IF ACTUAL EXISTING FRAMING CONDITIONS VARY FROM PLAN ASSUMPTIONS AFTER CEILING WALL COVERINGS ARE REMOVED.
- SEE SHEET **A11** FOR COMMON CODE REQUIREMENTS.
- CARBON MONOXIDE DETECTORS SHALL BE INSTALLED ON ALL LEVELS OF THE DWELLING AND PLACED IN PROXIMITY TO SLEEPING AREAS.
- SMOKE DETECTORS SHALL BE INSTALLED ON ALL LEVELS OF THE DWELLING AND WITHIN EACH SLEEPING AREA. DIRECT WIRING REQUIRED.
- VERIFY WINDOW & DOOR ROUGH OPENING SIZES WITH WINDOW & DOOR MANUFACTURER.
- ALL DIMENSIONS TO STUD WALL.
- CONTRACTOR TO VFY ALL DIMENSIONS ON SITE PRIOR TO CONSTRUCTION.
- CONTRACTOR TO DETERMINE & VERIFY ALL WASTE DIVERSION REQUIREMENTS PER THE LOCAL JURISDICTION. CONTRACTOR MAY BE REQUIRED TO REQUEST LEED REPORTS FROM RECEIVING FACILITIES.
- DOORS WITHOUT PLACEMENT DIMENSIONS WILL BE 3" OFF WALL OR ON CENTER, AS APPROPRIATE.
- CONTRACTOR TO VERIFY EXHAUST POINTS ARE NOT LESS THAN 3' FROM PROPERTY LINES, 3' FROM OPERABLE OPENINGS INTO THE BUILDING, AND 10' FROM MECHANICAL AIR INTAKES.
- EACH HABITABLE SPACE SHALL BE PROVIDED WITH OPERABLE WINDOWS WITH AN OPENABLE AREA NOT LESS THAN 4 SQUARE INCHES OF NET FREE AREA OF OPENING FOR EACH 10 CFM OF OUTDOOR AIR. WINDOW IS TO HAVE SCREEN AND SHALL BE CONTROLLABLE AND SECURABLE.



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BASEMENT FLOOR PLANS

| | |
|------------|--------|
| JOB NO. | 20-207 |
| HALF SCALE | 11x17 |
| FULL SCALE | 22x34 |
| SHEET | |

A2.1

PLAN KEYNOTES

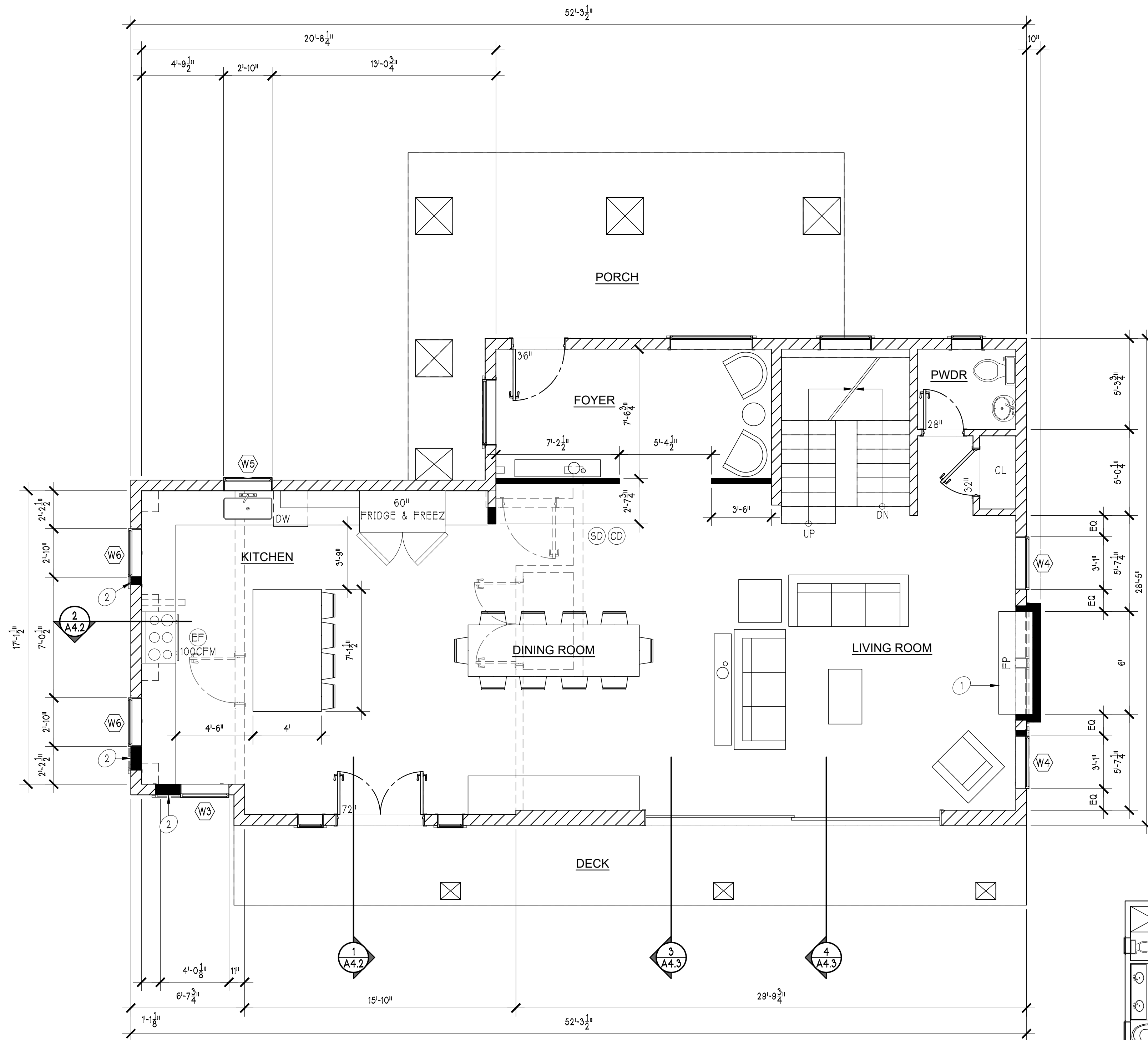
1. NEW FACTORY BUILT GAS FIRE PLACE INSERT w/ DIRECT VENT INTAKE & EXHAUST PIPES INSTALLED CONTINUOUS TO THE OUTSIDE. SHALL BE LISTED, LABELED & INSTALLED WITH THE CONDITIONS OF THE LISTING & BE IN ACCORDANCE WITH UL 127.
2. WINDOW OR DOOR TO BE INFILLED PER SHEET A11 - INSULATION AND FENESTRATION REQUIREMENTS. SEE 4/A5.1 FOR BALANCE OF INFO.

LEGEND

- NEW STUD WALL. SEE 1/A5.1 FOR FRAMING INFO.
- EXISTING WALL TO REMAIN
- DEMOLISHED WALLS
- SMOKE DETECTOR
- INDICATES REFERENCE TO KEYNOTES SEE KEYNOTES ON THIS SHEET FOR BALANCE OF INFORMATION
- CARBON MONOXIDE DETECTOR WITH BATTERY BACKUP.
- EXHAUST FAN (INTERMITTENT) 50 CFM UN.O.
- SEE DOOR AND WINDOW SCHEDULE ON SHEET A11 FOR DETAILED INFO. SEE 2/A5.1 & 3/A5.1 FOR FRAMING INFO.

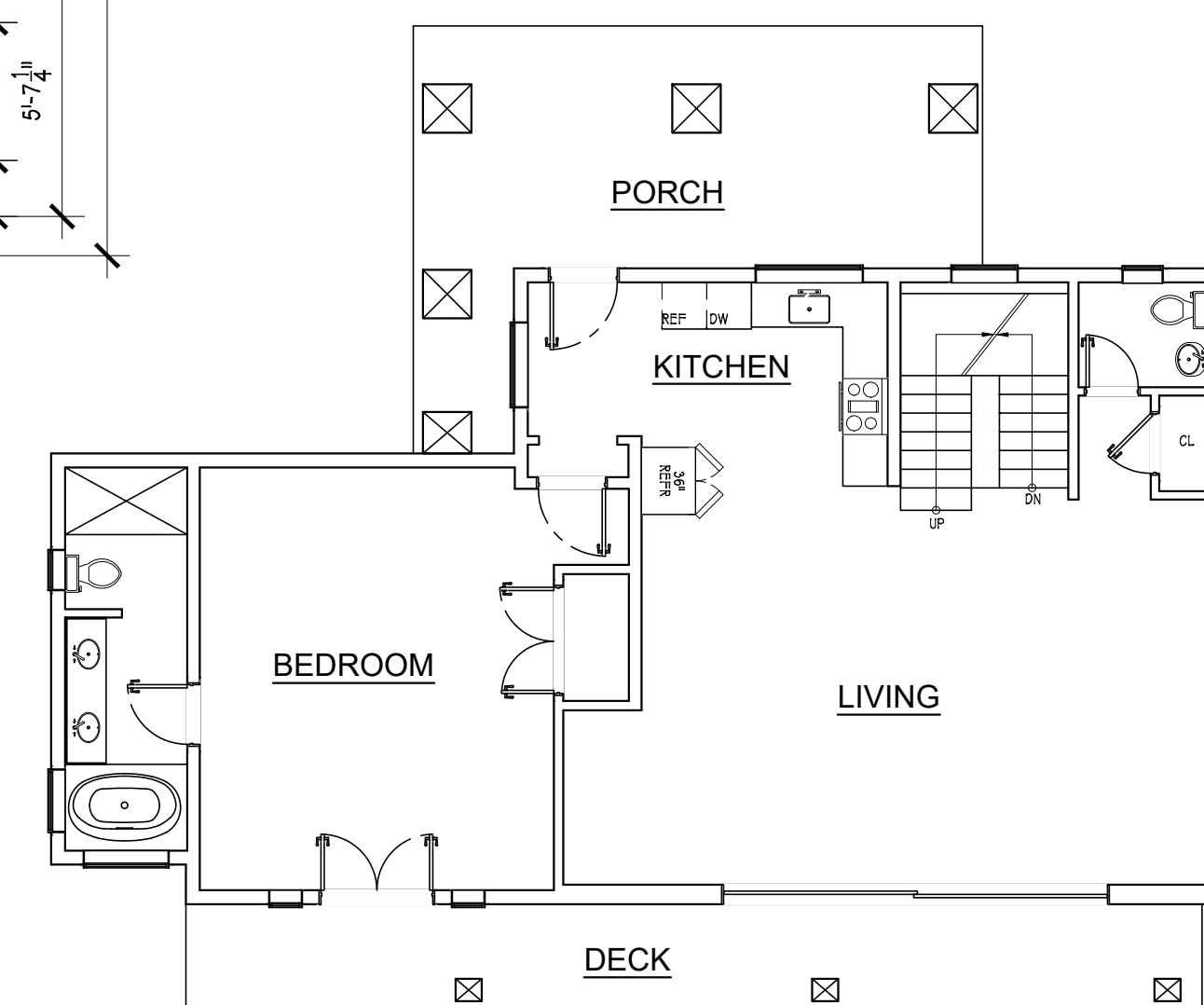
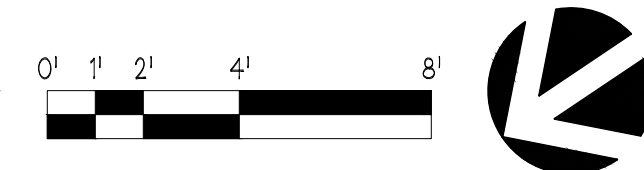
GENERAL NOTES

- PLANS MUST BE APPROVED BY THE GOVERNING BUILDING OFFICIAL OR PROFESSIONAL ENGINEER PRIOR TO WORK COMMENCING.
- CONTRACTOR TO VERIFY ALL STRUCTURAL LOAD PATHS AND EXISTING SHEAR / BRACED WALL LOCATIONS BEFORE REMOVING ANY WALLS. STRUCTURAL DEVIATIONS FROM THE PLAN SHOULD BE VERIFIED BY A STRUCTURAL ENGINEER OR BUILDING INSPECTOR. YEN DESIGN IS TO BE CONTACTED IF ACTUAL EXISTING FRAMING CONDITIONS VARY FROM PLAN ASSUMPTIONS AFTER CEILING WALL COVERINGS ARE REMOVED.
- SEE SHEET A11 FOR COMMON CODE REQUIREMENTS.
- CARBON MONOXIDE DETECTORS SHALL BE INSTALLED ON ALL LEVELS OF THE DWELLING AND PLACED IN PROXIMITY TO SLEEPING AREAS.
- SMOKE DETECTORS SHALL BE INSTALLED ON ALL LEVELS OF THE DWELLING AND WITHIN EACH SLEEPING AREA. DIRECT WIRING REQUIRED.
- VERIFY WINDOW & DOOR ROUGH OPENING SIZES WITH WINDOW & DOOR MANUFACTURER.
- ALL DIMENSIONS TO STUD WALL.
- CONTRACTOR TO VFY ALL DIMENSIONS ON SITE PRIOR TO CONSTRUCTION.
- CONTRACTOR TO DETERMINE & VERIFY ALL WASTE DIVERSION REQUIREMENTS PER THE LOCAL JURISDICTION. CONTRACTOR MAY BE REQUIRED TO REQUEST LEED REPORTS FROM RECEIVING FACILITIES.
- DOORS WITHOUT PLACEMENT DIMENSIONS WILL BE 3" OFF WALL OR ON CENTER, AS APPROPRIATE.
- CONTRACTOR TO VERIFY EXHAUST POINTS ARE NOT LESS THAN 3' FROM PROPERTY LINES, 3' FROM OPERABLE OPENINGS INTO THE BUILDING, AND 10' FROM MECHANICAL AIR INTAKES.
- EACH HABITABLE SPACE SHALL BE PROVIDED WITH OPERABLE WINDOWS WITH AN OPENABLE AREA NOT LESS THAN 4 SQUARE INCHES OF NET FREE AREA OF OPENING FOR EACH 10 CFM OF OUTDOOR AIR. WINDOW IS TO HAVE SCREEN AND SHALL BE CONTROLLABLE AND SECURABLE.



PROPOSED MAIN FLOOR PLAN

22x34: SCALE 1/4" = 1'-0"
11x17: SCALE 1/8" = 1'-0"

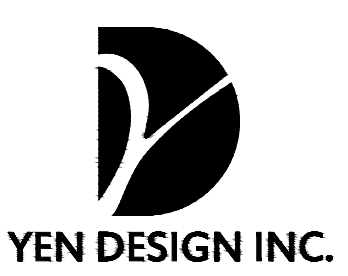


EXISTING MAIN FLOOR PLAN

22x34: SCALE 1/8" = 1'-0"
11x17: SCALE 1/16" = 1'-0"



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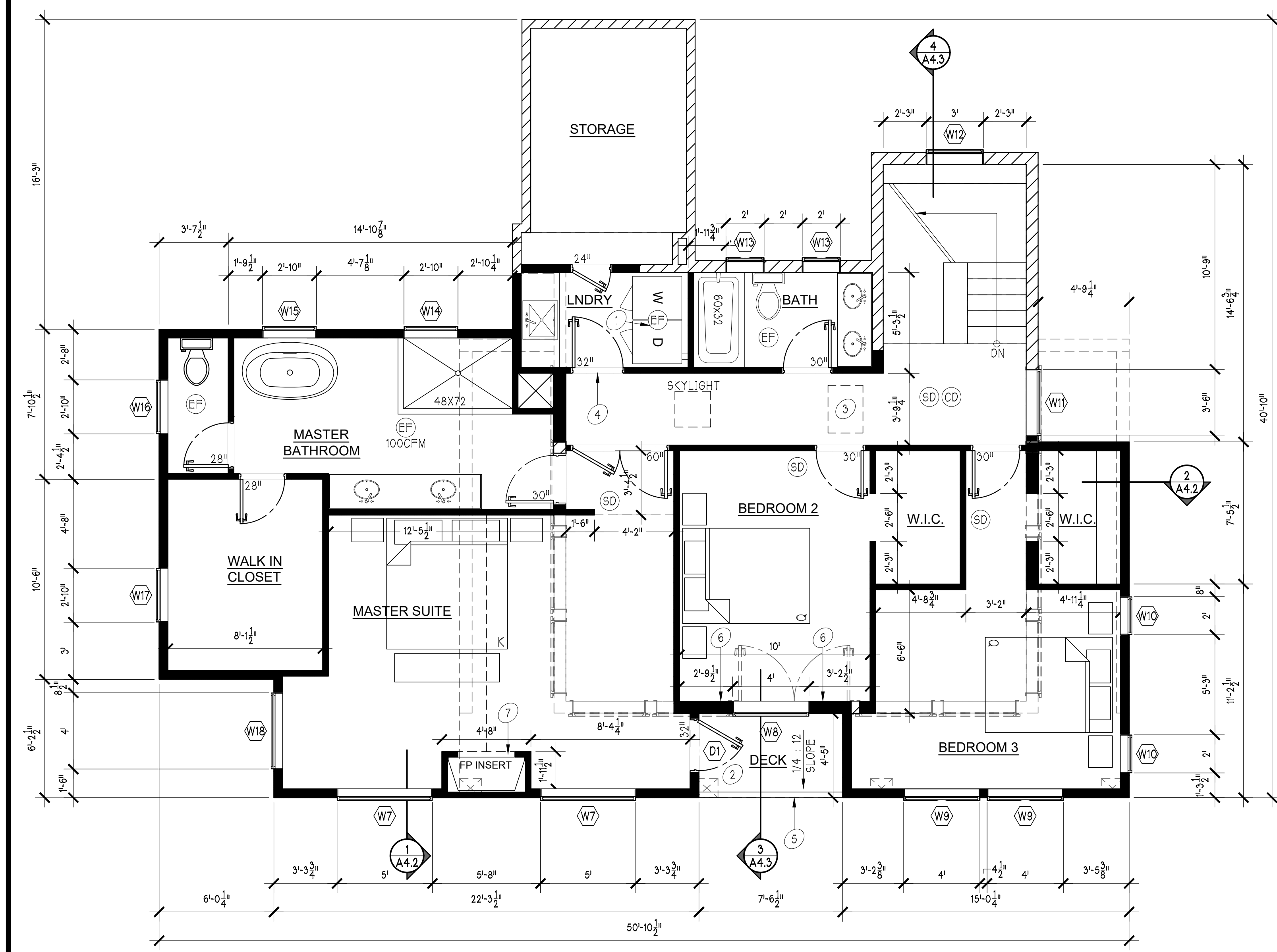
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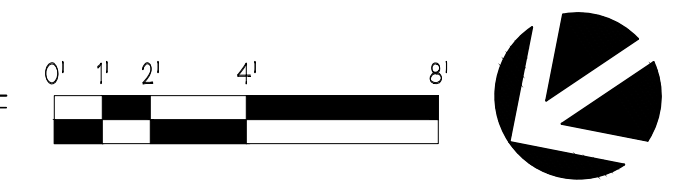
MAIN FLOOR PLANS

| | |
|------------|--------|
| JOB NO. | 20-207 |
| HALF SCALE | 11x17 |
| FULL SCALE | 22x34 |
| SHEET | |

A2.2



PROPOSED UPPER FLOOR PLAN
 22x34: SCALE 1/4" = 1'-0"
 11x17: SCALE 1/8" = 1'-0"



PLAN KEYNOTES

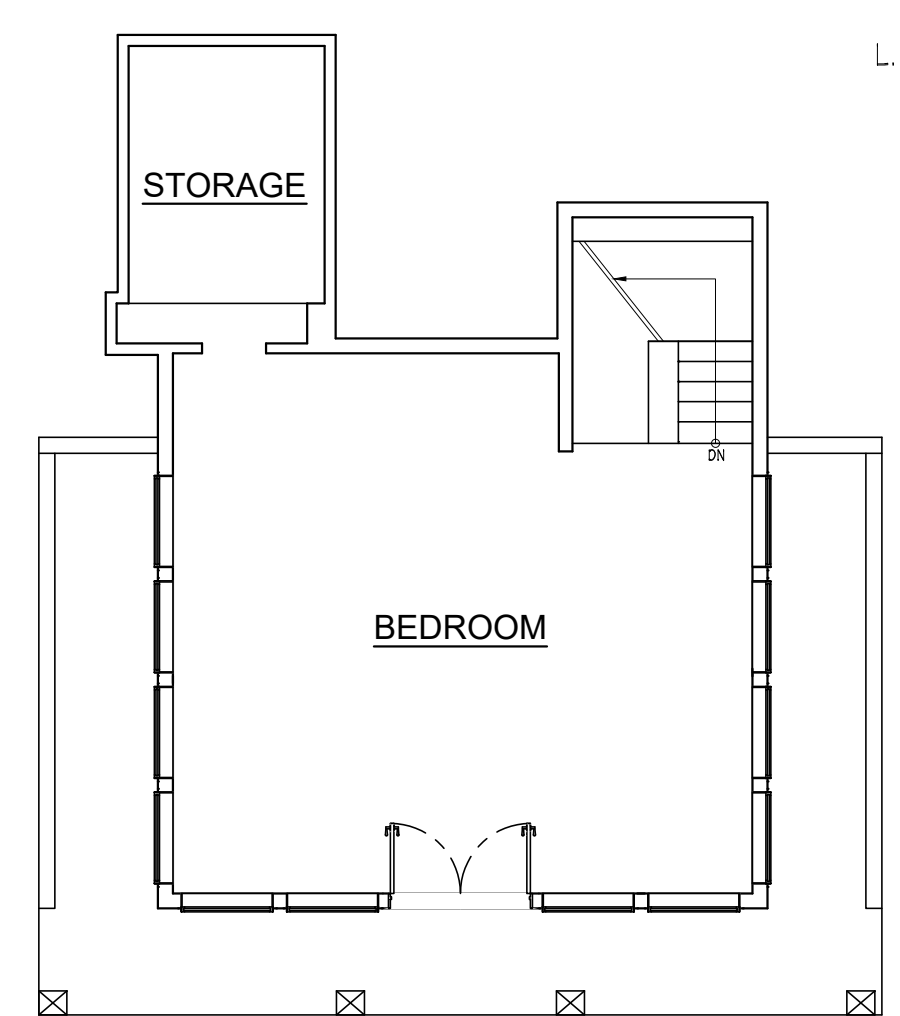
- 90 CFM CONTINUOUS WHOLE HOUSE FAN AT 0.25" WATER GAUGE WITH A SONE RATING OF 10 OR LESS MEASURED AT 0.1 INCHES WATER GAUGE. IF FAN IS TO BE INTERMITTENT, APPLY VENTILATION RATE FACTOR PER IRC M1507.3.3(2) ON PAGE **A11**.
- TPO ROOFING ON VAPOR BARRIER ON SHEATHING PER STRUCTURAL DRAWINGS. PROVIDE WALKABLE SURFACE PER MANUFACTURE ABOVE THE TPO MEMBRANE.
- MIN 22"x30" ATTIC ACCESS.
- DOOR SHALL BE LOUVERED OR BE UNDERCUT TO A MINIMUM OF 1/2" ABOVE THE SURFACE OF THE FINISH FLOOR COVERING.
- CRYSTALITE INFINITY GLASS GUARDRAIL SYSTEM. 7/16" FULLY TEMPERED GLASS RAILING AT 36" IN HEIGHT. SYSTEM ADHERES TO THE APPROPRIATE ASTM STANDARD SPECIFICATIONS (C1048, C1172, C1036) AND THE REQUIREMENTS IN ASCE 7 SECTION 4.5.1. CONTRACTOR TO INSTALL RAILING SYSTEM EXACTLY TO MANUFACTURERS SPECIFICATIONS. IF CONTRACTOR DECIDES TO INSTALL A DIFFERENT RAILING SYSTEM, THEY MUST VERIFY THE NEW SYSTEM IS IN COMPLIANCE WITH ASCE 7 SECTION 4.5.1.
- WINDOW OR DOOR TO BE INFILLED PER SHEET **A11** - INSULATION AND FENESTRATION REQUIREMENTS. SEE **4/A5.1** FOR BALANCE OF INFO.
- NEW FACTORY BUILT GAS FIRE PLACE INSERT W/ DIRECT VENT INTAKE & EXHAUST PIPES INSTALLED CONTINUOUS TO THE OUTSIDE. SHALL BE LISTED, LABELED & INSTALLED WITH THE CONDITIONS OF THE LISTING & BE IN ACCORDANCE WITH UL 127.

LEGEND

- NEW STUD WALL. SEE **1/A5.1** FOR FRAMING INFO.
- EXISTING WALL TO REMAIN
- DEMOLISHED WALLS
- SMOKE DETECTOR
- CARBON MONOXIDE DETECTOR WITH BATTERY BACKUP.
- EXHAUST FAN (INTERMITTENT) 50 CFM UNO.
- SEE DOOR AND WINDOW SCHEDULE ON SHEET **A11** FOR DETAILED INFO. SEE **2/A5.1** & **3/A5.1** FOR FRAMING INFO.

GENERAL NOTES

- PLANS MUST BE APPROVED BY THE GOVERNING BUILDING OFFICIAL OR PROFESSIONAL ENGINEER PRIOR TO WORK COMMENCING.
- CONTRACTOR TO VERIFY ALL STRUCTURAL LOAD PATHS AND EXISTING SHEAR / BRACED WALL LOCATIONS BEFORE REMOVING ANY WALLS. STRUCTURAL DEVIATIONS FROM THE PLAN SHOULD BE VERIFIED BY A STRUCTURAL ENGINEER OR BUILDING INSPECTOR. YEN DESIGN IS TO BE CONTACTED IF ACTUAL EXISTING FRAMING CONDITIONS VARY FROM PLAN ASSUMPTIONS AFTER CEILING WALL COVERINGS ARE REMOVED.
- SEE SHEET **A11** FOR COMMON CODE REQUIREMENTS.
- CARBON MONOXIDE DETECTORS SHALL BE INSTALLED ON ALL LEVELS OF THE DWELLING AND PLACED IN PROXIMITY TO SLEEPING AREAS.
- SMOKE DETECTORS SHALL BE INSTALLED ON ALL LEVELS OF THE DWELLING AND WITHIN EACH SLEEPING AREA DIRECT WIRING REQUIRED.
- VERIFY WINDOW & DOOR ROUGH OPENING SIZES WITH WINDOW & DOOR MANUFACTURER.
- ALL DIMENSIONS TO STUD WALL.
- CONTRACTOR TO VFY ALL DIMENSIONS ON SITE PRIOR TO CONSTRUCTION.
- CONTRACTOR TO DETERMINE & VERIFY ALL WASTE DIVERSION REQUIREMENTS PER THE LOCAL JURISDICTION. CONTRACTOR MAY BE REQUIRED TO REQUEST LEED REPORTS FROM RECEIVING FACILITIES.
- DOORS WITHOUT PLACEMENT DIMENSIONS WILL BE 3" OFF WALL OR ON CENTER, AS APPROPRIATE.
- CONTRACTOR TO VERIFY EXHAUST POINTS ARE NOT LESS THAN 3' FROM PROPERTY LINES, 3' FROM OPERABLE OPENINGS INTO THE BUILDING, AND 10' FROM MECHANICAL AIR INTAKES.
- EACH HABITABLE SPACE SHALL BE PROVIDED WITH OPERABLE WINDOWS WITH AN OPENABLE AREA NOT LESS THAN 4 SQUARE INCHES OF NET FREE AREA OF OPENING FOR EACH 10 CFM OF OUTDOOR AIR. WINDOW IS TO HAVE SCREEN AND SHALL BE CONTROLLABLE AND SECURABLE.



EXISTING UPPER FLOOR PLAN

22x34: SCALE 1/8" = 1'-0"
 11x17: SCALE 1/16" = 1'-0"



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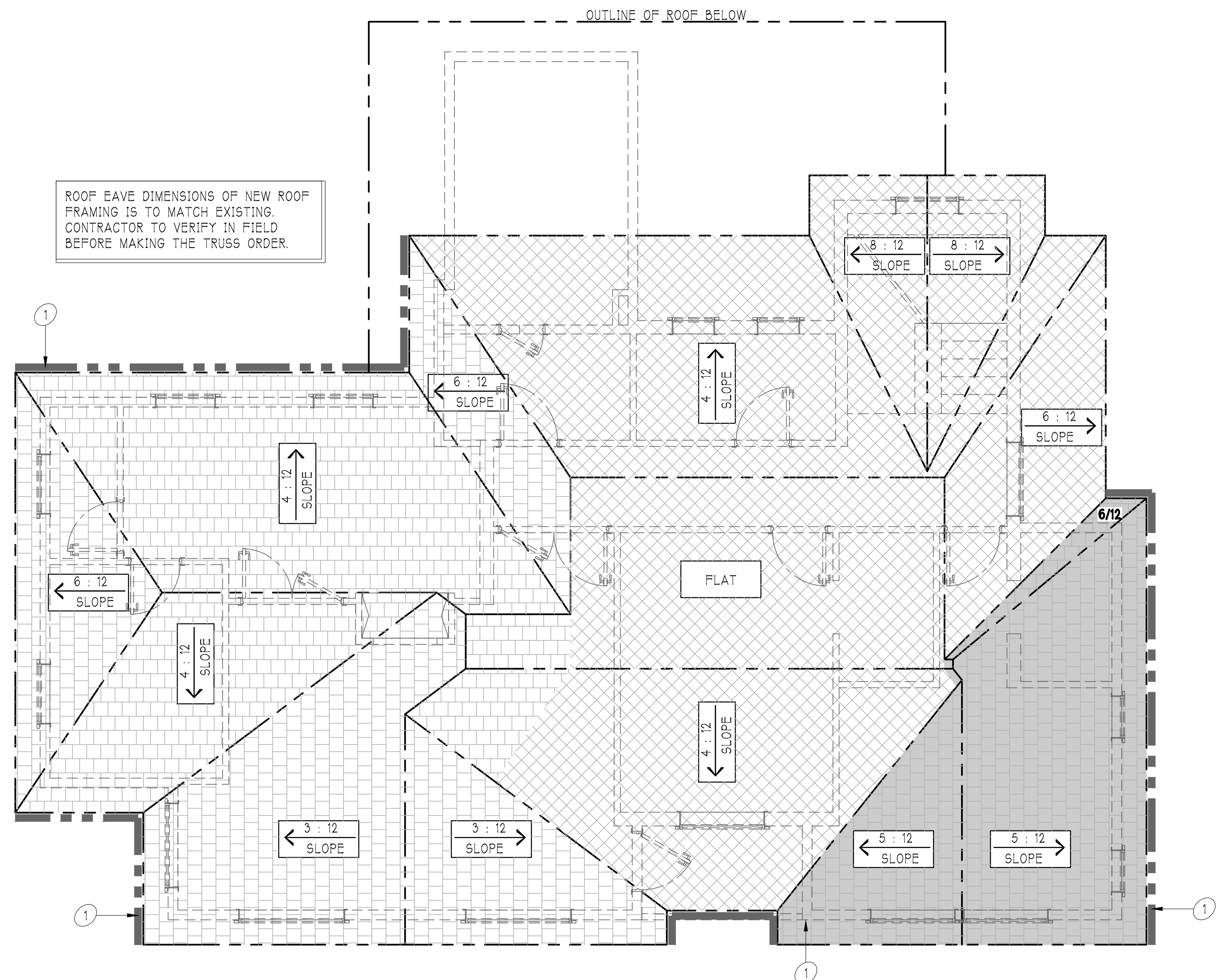
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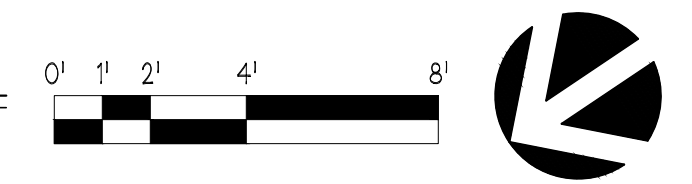
UPPER FLOOR PLANS

| | |
|------------|--------|
| JOB NO. | 20-207 |
| HALF SCALE | 11x17 |
| FULL SCALE | 22x34 |
| SHEET | |

A2.3



ROOF PLAN
 22x34: SCALE 1/4" = 1'-0"
 11x17: SCALE 1/8" = 1'-0"



LEGEND

- STRUCTURE BELOW
- ROOF LINE
- NEW GUTTER
- ⊕ INDICATES REFERENCE TO KEYNOTES SEE KEYNOTES ON THIS SHEET FOR BALANCE OF INFORMATION
- [Cross-hatched] EXISTING ROOF FRAMING
- [Grid pattern] NEW ROOF FRAMING
- [Solid grey] OVER FRAMING PER 6/A5.1

GENERAL NOTES

- A. PLANS MUST BE APPROVED BY THE GOVERNING BUILDING OFFICIAL OR PROFESSIONAL ENGINEER PRIOR TO WORK COMMENCING.
- B. CONTRACTOR TO VERIFY ALL STRUCTURAL LOAD PATHS AND EXISTING SHEAR / BRACED WALL LOCATIONS BEFORE REMOVING ANY WALLS. STRUCTURAL DEVIATIONS FROM THE PLAN SHOULD BE VERIFIED BY A STRUCTURAL ENGINEER OR BUILDING INSPECTOR. YEN DESIGN IS TO BE CONTACTED IF ACTUAL EXISTING FRAMING CONDITIONS VARY FROM PLAN ASSUMPTIONS AFTER CEILING WALL COVERINGS ARE REMOVED.
- C. SEE SHEET A11 FOR COMMON CODE REQUIREMENTS.
- D. CARBON MONOXIDE DETECTORS SHALL BE INSTALLED ON ALL LEVELS OF THE DWELLING AND PLACED IN PROXIMITY TO SLEEPING AREAS.
- E. SMOKE DETECTORS SHALL BE INSTALLED ON ALL LEVELS OF THE DWELLING AND WITHIN EACH SLEEPING AREA. DIRECT WIRING REQUIRED.
- F. VERIFY WINDOW & DOOR ROUGH OPENING SIZES WITH WINDOW & DOOR MANUFACTURER.
- G. ALL DIMENSIONS TO STUD WALL.
- H. CONTRACTOR TO VFY ALL DIMENSIONS ON SITE PRIOR TO CONSTRUCTION.
- I. CONTRACTOR TO DETERMINE & VERIFY ALL WASTE DIVERSION REQUIREMENTS PER THE LOCAL JURISDICTION. CONTRACTOR MAY BE REQUIRED TO REQUEST LEED REPORTS FROM RECEIVING FACILITIES.
- J. DOORS WITHOUT PLACEMENT DIMENSIONS WILL BE 3" OFF WALL OR ON CENTER, AS APPROPRIATE.
- K. CONTRACTOR TO VERIFY EXHAUST POINTS OF TERMINATION ARE NOT LESS THAN 3' FROM PROPERTY LINES, 3' FROM OPERABLE OPENINGS INTO THE BUILDING, AND 10' FROM MECHANICAL AIR INTAKES.

ROOF VENT CALC.

882 SQ-FT
 355 SQ-FT = 2.97 SQ-FT OR 429 SQ-IN OF NET CLEAR AREA ATTIC ATTIC VENTILATION.
 ATTIC VENTILATION METHOD TO BE DETERMINED BY CONTRACTOR: VENTILATION OF ALL ATTIC SPACES OVER HEATED AREAS TO BE DISTRIBUTED AS SUCH:
 1/2 GABLE, ROOF JACK, OR RIDGE VENTING
 1/2 BIRD BLOCK OR SOFFIT VENTING.

PLAN KEYNOTES

1. DOWN SPOUT LOCATION. STORM WATER TO MITIGATED VIA EXISTING STORM WATER CONTROL SYSTEM ON THE PROPERTY.

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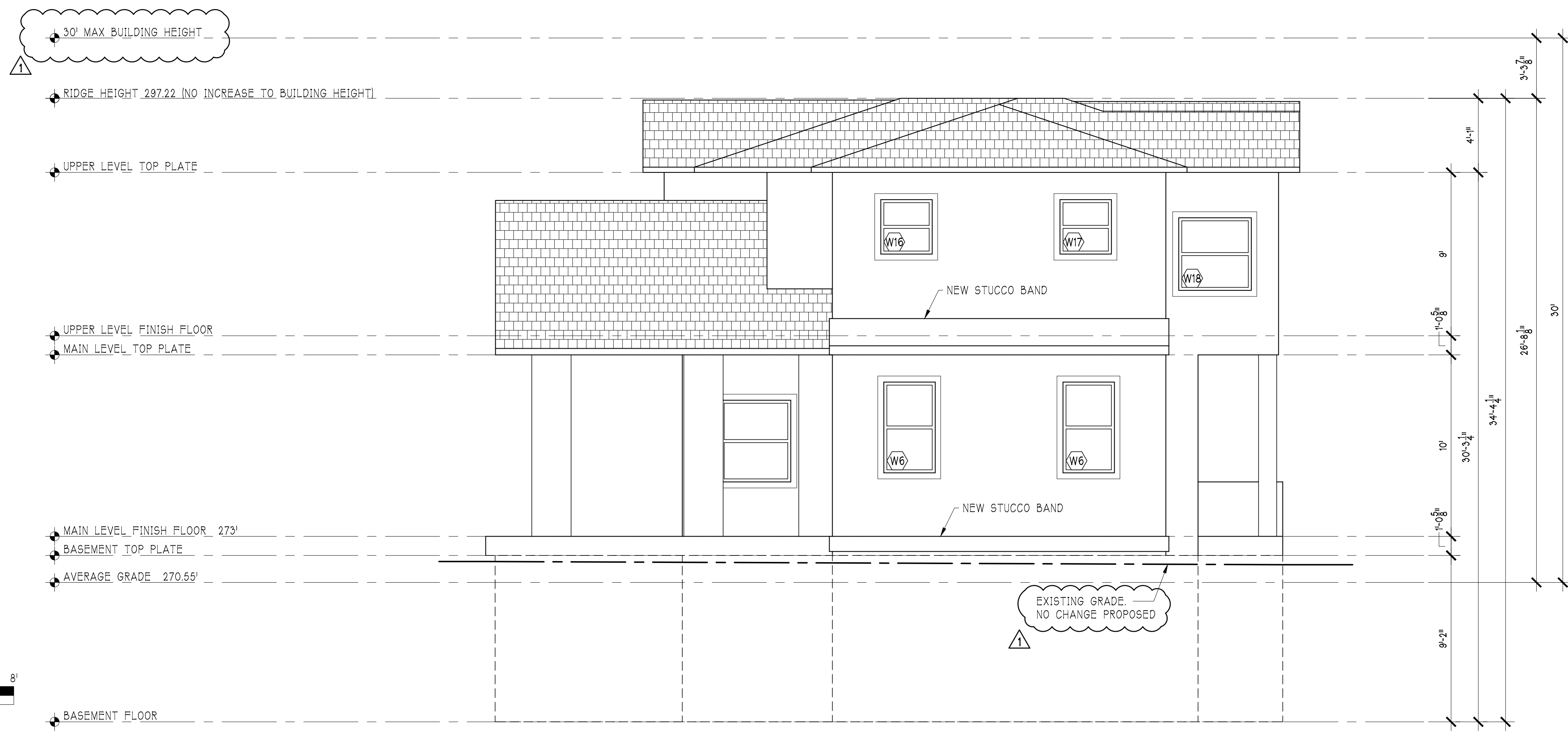
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ROOF PLAN

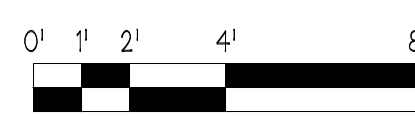
JOB NO. 20-207
 HALF SCALE 11x17
 FULL SCALE 22x34
 SHEET

A2.4



NORTH ELEVATION

22x34: SCALE 1/4" = 1'-0"
11x17: SCALE 1/8" = 1'-0"



EAST ELEVATION

22x34: SCALE 1/4" = 1'-0"
11x17: SCALE 1/8" = 1'-0"



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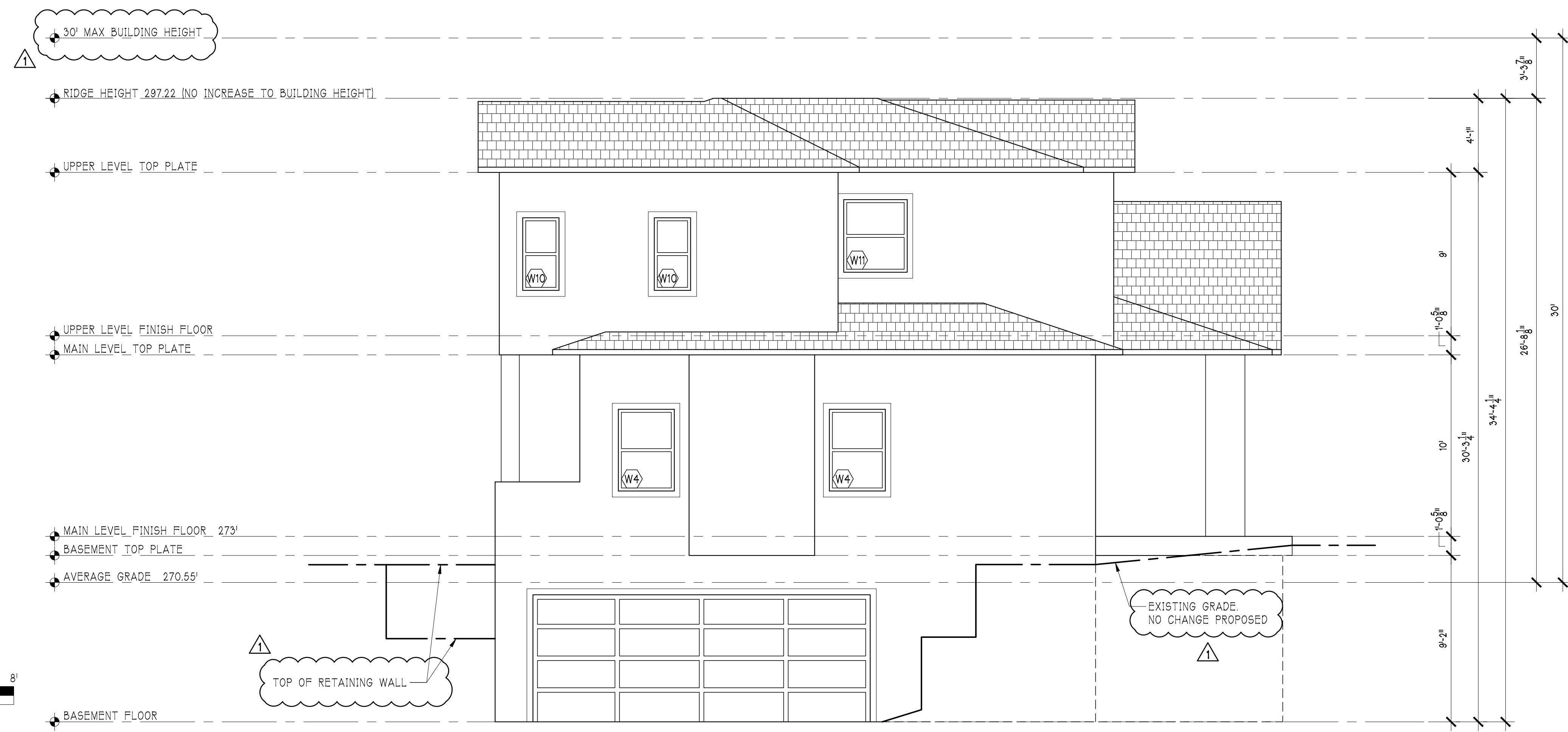
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ELEVATIONS

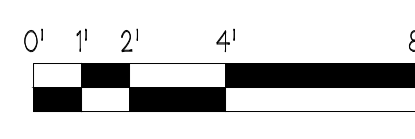
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| JOB NO. | 20-207 |
| HALF SCALE | 11x17 |
| FULL SCALE | 22x34 |
| SHEET | |

A3.1



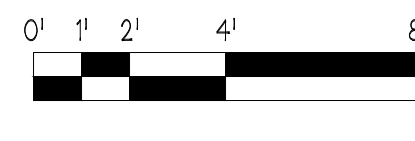
SOUTH ELEVATION

22x34: SCALE 1/4" = 1'-0"
11x17: SCALE 1/8" = 1'-0"



WEST ELEVATION

22x34: SCALE 1/4" = 1'-0"
11x17: SCALE 1/8" = 1'-0"



| REV | DATE | DESCRIPTION |
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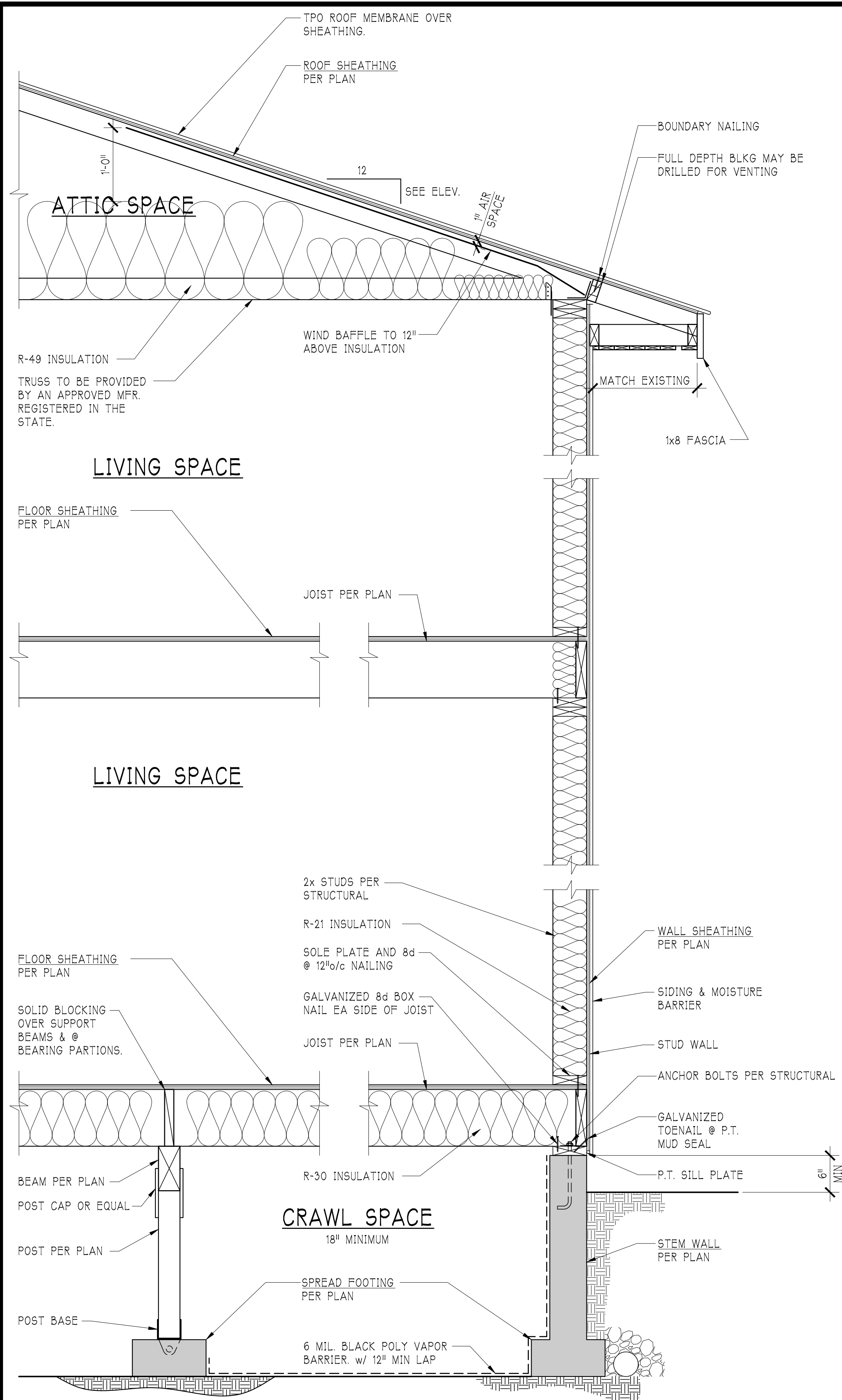
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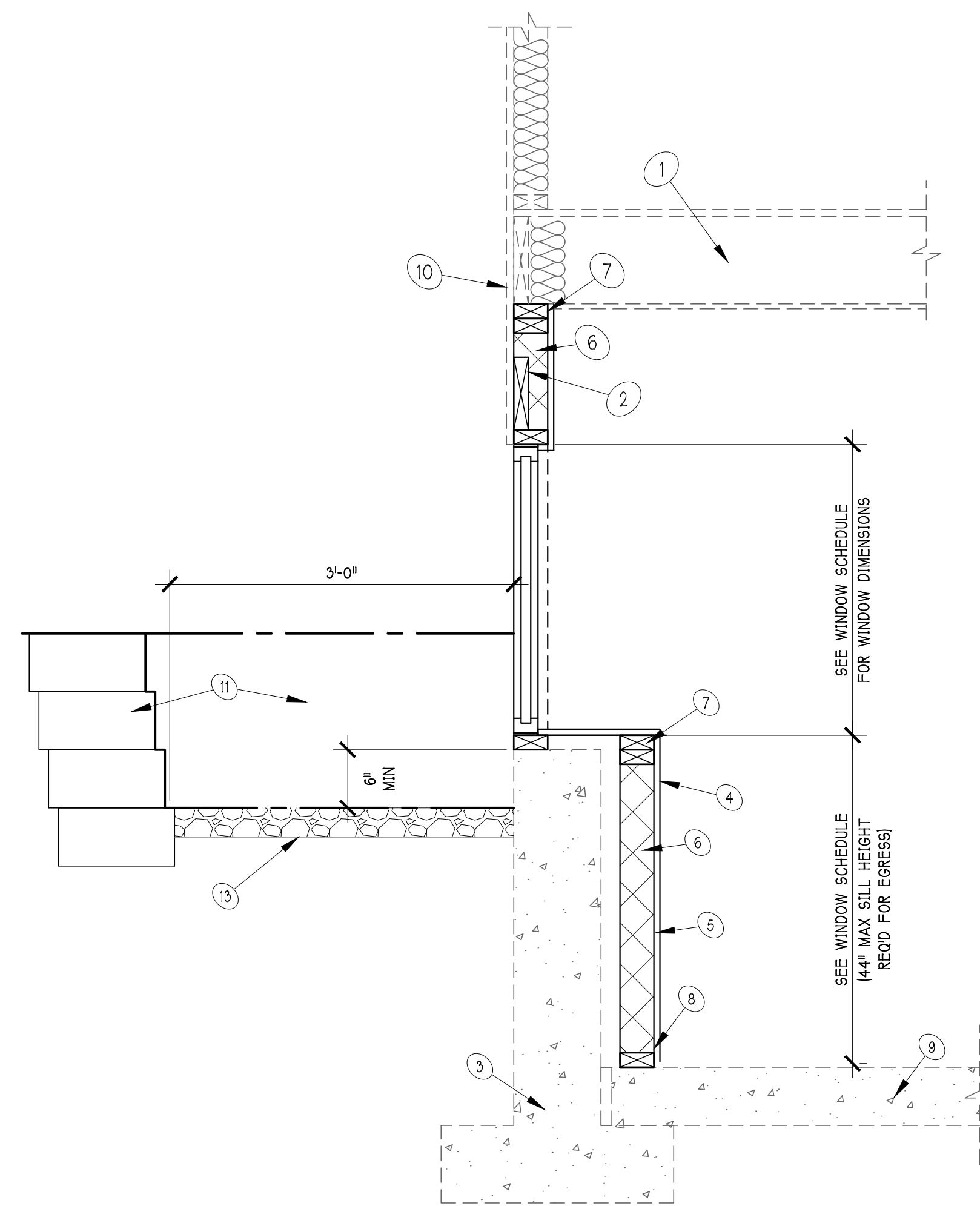
ELEVATIONS

| | |
|------------|--------|
| JOB NO. | 20-207 |
| HALF SCALE | 11x17 |
| FULL SCALE | 22x34 |
| SHEET | |

A3.2



1 TYP ADDITION WALL SECTION
 A4.1 22x34 SCALE: 1/8"=1'-0"
 11x17 SCALE: 2/8"=1'-0"



2 TYPICAL BASEMENT WINDOW SECTION
 A4.1 SCALE: 1/4"=1'-0"

STRUCTURAL ELEMENTS ARE FOR REFERENCE ONLY. IF DISCREPANCIES OCCUR, STRUCTURAL DRAWINGS GOVERN DESIGN.

| REV | DATE | DESCRIPTION |
|-----|----------|--------------------|
| 0 | 01.29.21 | PERMIT SUBMITTAL |
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ENGINEER STAMP

SECTION KEYNOTES

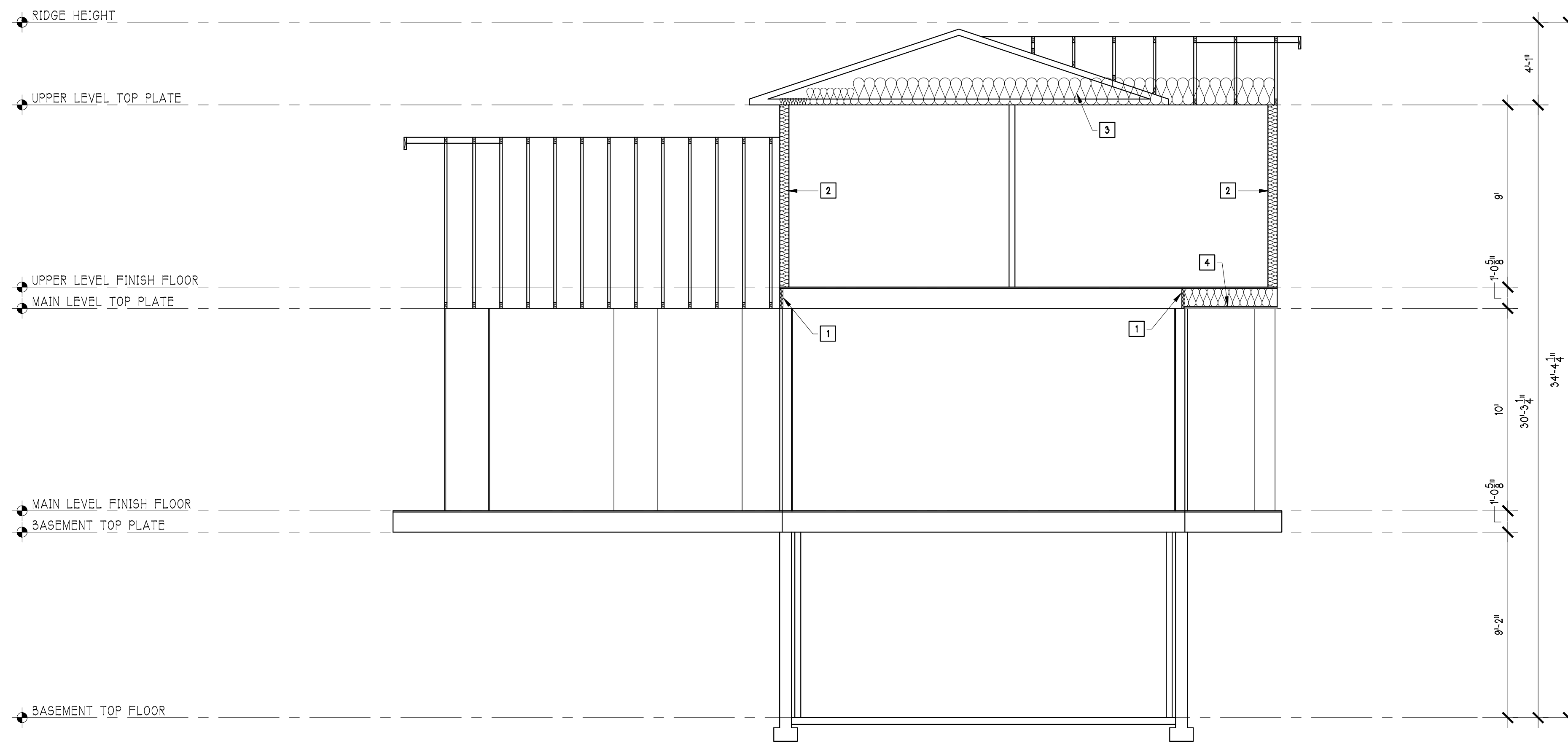
1. EXISTING JOISTS
2. HEADER PER PLAN. FILL SPACE BEHIND HEADERS W/ RIGID INSULATION.
3. EXISTING FOUNDATION WALL
4. 1/2" GYPSUM BOARD
5. 2X4 STUD WALL w/ STUDS @ 16" O.C. PLACED 2" OFF WALL
6. R-21 INSULATION
7. 2x DOUBLE TOP PLATE
8. 2X6 P.T. BOTT PLATE ATTACHED W 3" POWDER ACTUATED FASTENERS @ 48" O.C. MAX.
9. EXISTING SLAB
10. EXISTING WALL COVERING
11. CONCRETE BLOCKS OR PRE-MANUFACTURED WINDOW WELL
12. UNUSED
13. FREE-DRAINING GRAVEL

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 AL SABER
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BUILDING SECTIONS

JOB NO. 20-207
 HALF SCALE 11x17
 FULL SCALE 22x34
 SHEET

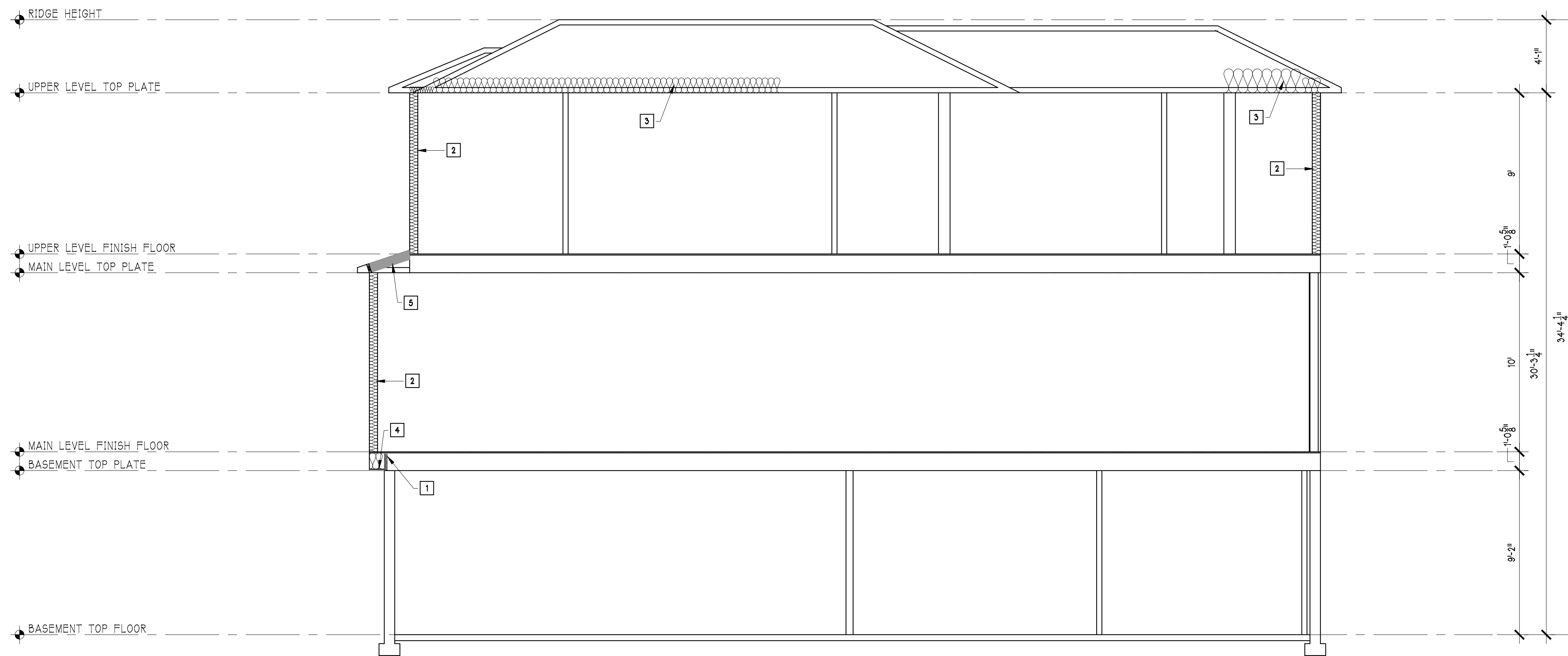
A4.1



1 TRANSVERSE SECTION
 22x34 SCALE: 1/2"=1'-0"
 11x17 SCALE: 1"=1'-0"

INSULATION KEYNOTES

1. R-10 BATT INSULATION AT RIM JOIST
2. R-21 BATT INSULATION AT ALL ABOVE GRADE EXT. WALLS.
3. R-49 BATT INSULATION AT ROOF. PROVIDE 1" AIRSPACE ABOVE INSULATION AT THE EAVES AND IN ENCLOSED RAFTER SPACE.
4. 1" CLOSED CELL FOAM INSULATION (R-6.5 TOTAL) ON THE UNDERSIDE OF SHEATHING. THE APPLIED SPRAY FOAM MUST BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS BY A CERTIFIED INSTALLER. A COPY OF THE ICC-ES REPORT FOR THE INSULATION PRODUCT MUST BE PROVIDED ON THE SITE FOR THE FIELD INSPECTOR. FILL REMAINING VOID WITH BATT INSULATION w/ A MIN R-VALUE OF 31.5.
5. 6" CLOSED CELL FOAM INSULATION (R-38 TOTAL) ON THE UNDERSIDE OF SHEATHING. THE APPLIED SPRAY FOAM MUST BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS BY A CERTIFIED INSTALLER. A COPY OF THE ICC-ES REPORT FOR THE INSULATION PRODUCT MUST BE PROVIDED ON THE SITE FOR THE FIELD INSPECTOR.



2 LONGITUDINAL SECTION
 22x34 SCALE: 1/2"=1'-0"
 11x17 SCALE: 1"=1'-0"

INSULATION ONLY SHOWN IN NEW WOOD FRAMING CAVITIES. EXISTING FRAMING INSULATION REMAIN AS IT. IF EXISTING FRAMING CAVITIES ARE OPENED DURING CONSTRUCTION, THEY ARE TO BE INSULATED PER THE INSULATION TABLE ON SHEET A1.1.

STRUCTURAL ELEMENTS ARE FOR REFERENCE ONLY. IF DISCREPANCIES OCCUR, STRUCTURAL DRAWINGS GOVERN DESIGN.

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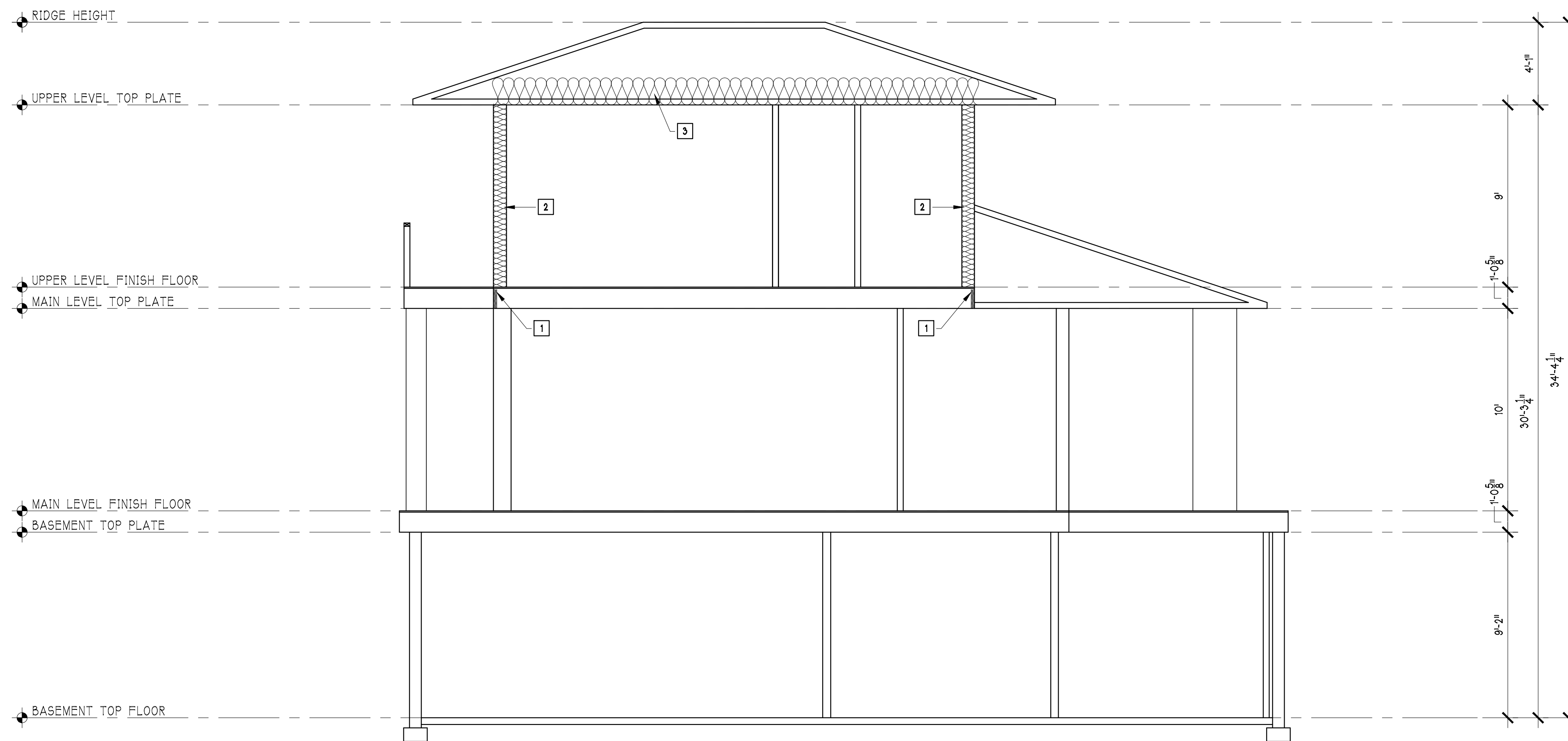
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BUILDING SECTIONS

| | |
|------------|--------|
| JOB NO. | 20-207 |
| HALF SCALE | 11x17 |
| FULL SCALE | 22x34 |
| SHEET | |

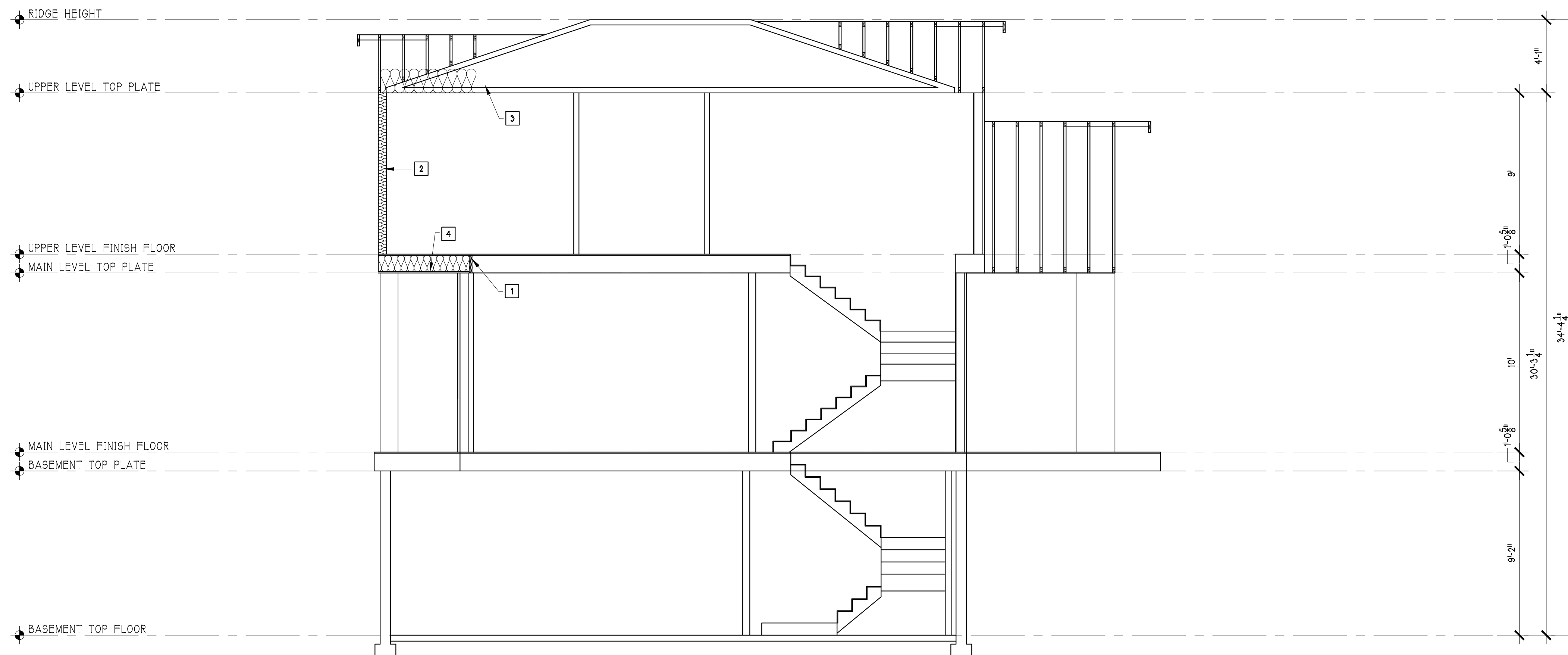
A4.2



3
A4.3 TRANSVERSE SECTION
22x34 SCALE: 1/2"=1'-0"
11x17 SCALE: 1"=1'-0"

INSULATION KEYNOTES

1. R-10 BATT INSULATION AT RIM JOIST
2. R-21 BATT INSULATION AT ALL ABOVE GRADE EXT. WALLS.
3. R-49 BATT INSULATION AT ROOF. PROVIDE 1" AIRSPACE ABOVE INSULATION AT THE EAVES AND IN ENCLOSED RAFTER SPACE.
4. 1" CLOSED CELL FOAM INSULATION (R-6.5 TOTAL) ON THE UNDERSIDE OF SHEATHING. THE APPLIED SPRAY FOAM MUST BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS BY A CERTIFIED INSTALLER. A COPY OF THE ICC-ES REPORT FOR THE INSULATION PRODUCT MUST BE PROVIDED ON THE SITE FOR THE FIELD INSPECTOR. FILL REMAINING VOID WITH BATT INSULATION w/ A MIN R-VALUE OF 31.5.
5. 6" CLOSED CELL FOAM INSULATION (R-38 TOTAL) ON THE UNDERSIDE OF SHEATHING. THE APPLIED SPRAY FOAM MUST BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS BY A CERTIFIED INSTALLER. A COPY OF THE ICC-ES REPORT FOR THE INSULATION PRODUCT MUST BE PROVIDED ON THE SITE FOR THE FIELD INSPECTOR.



4
A4.3 TRANSVERSE SECTION
22x34 SCALE: 1/2"=1'-0"
11x17 SCALE: 1"=1'-0"

INSULATION ONLY SHOWN IN NEW WOOD FRAMING CAVITIES. EXISTING FRAMING INSULATION REMAIN AS IT. IF EXISTING FRAMING CAVITIES ARE OPENED DURING CONSTRUCTION, THEY ARE TO BE INSULATED PER THE INSULATION TABLE ON SHEET A1.1.

STRUCTURAL ELEMENTS ARE FOR REFERENCE ONLY. IF DISCREPANCIES OCCUR, STRUCTURAL DRAWINGS GOVERN DESIGN.

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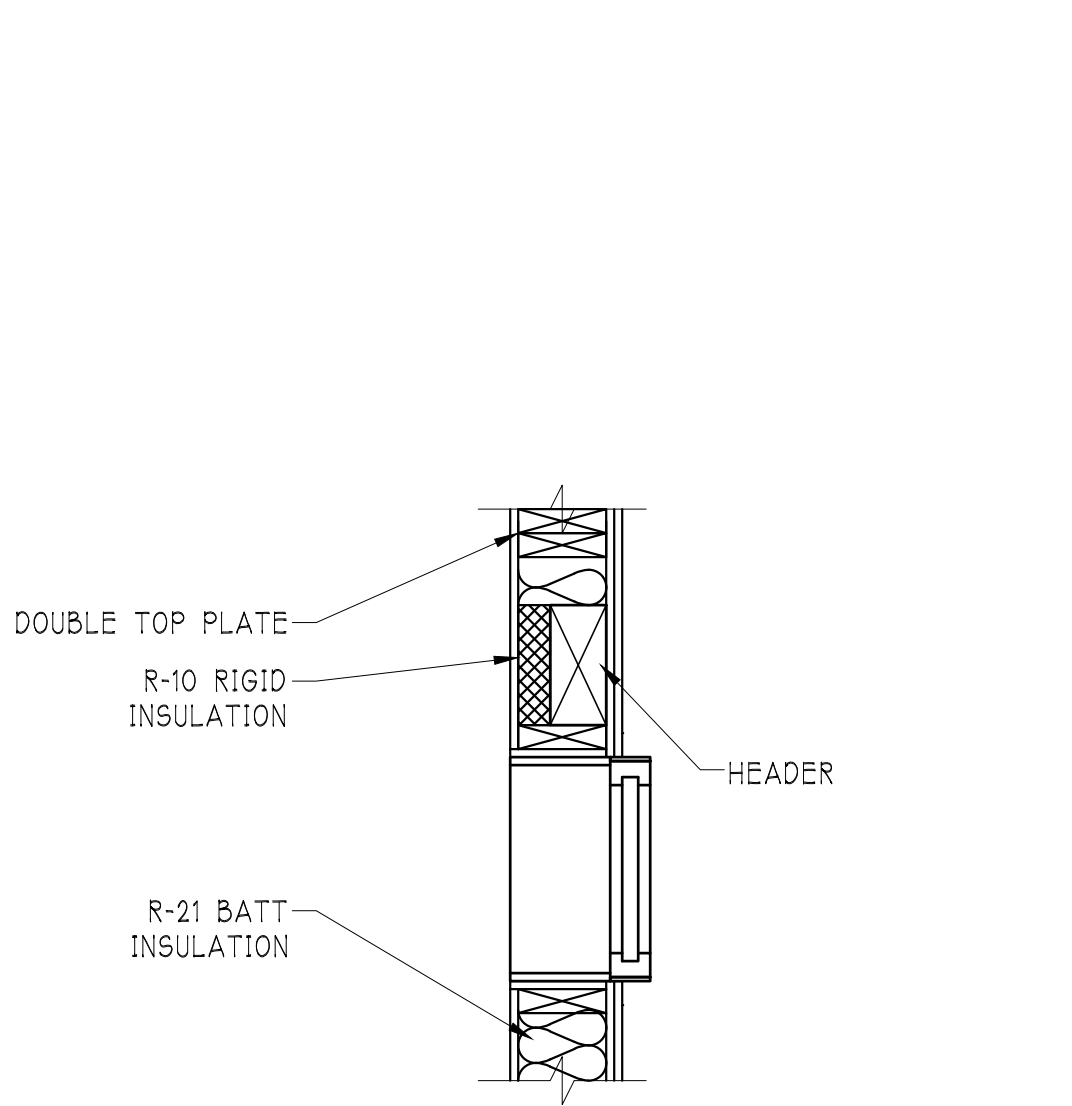
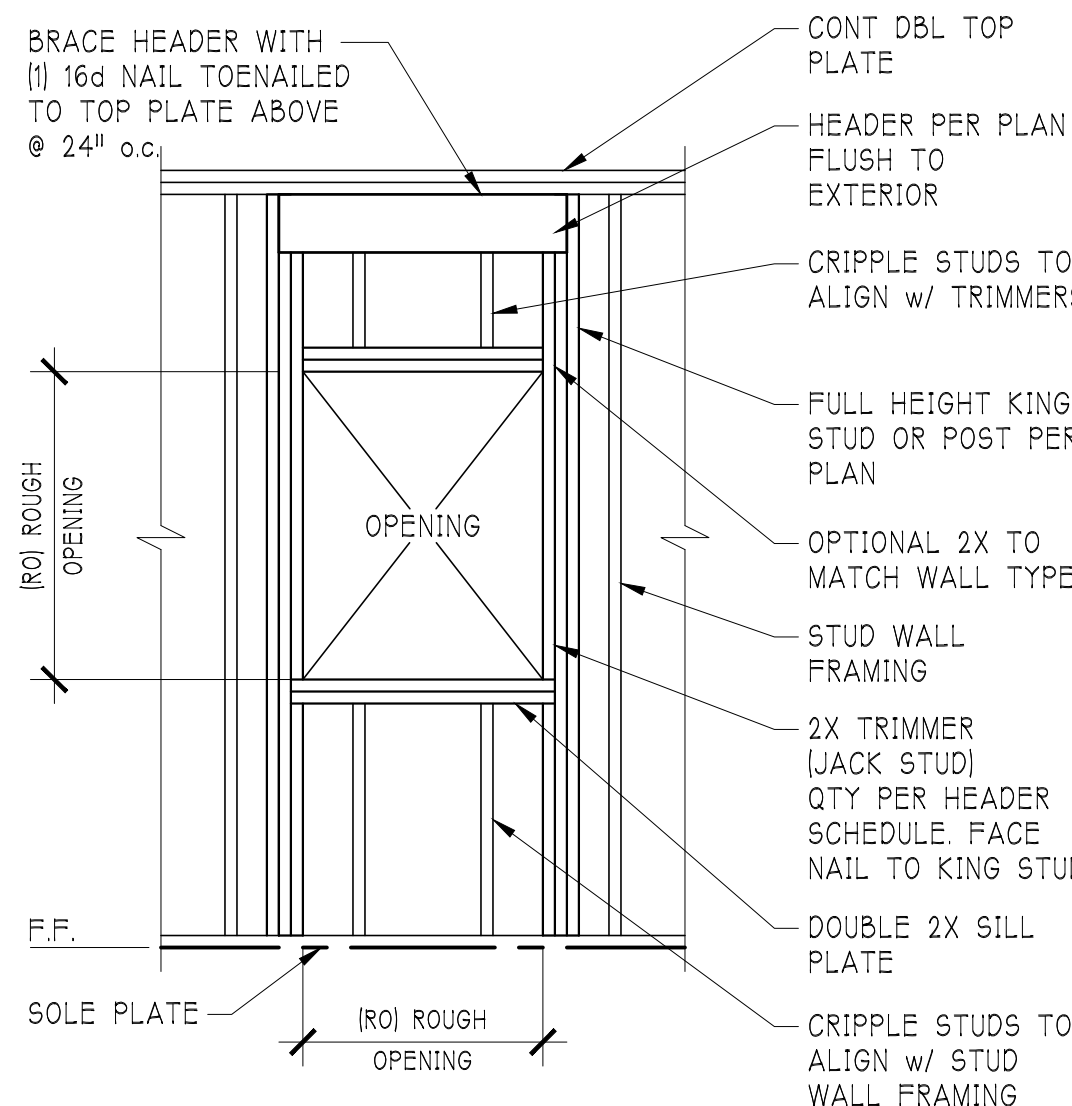
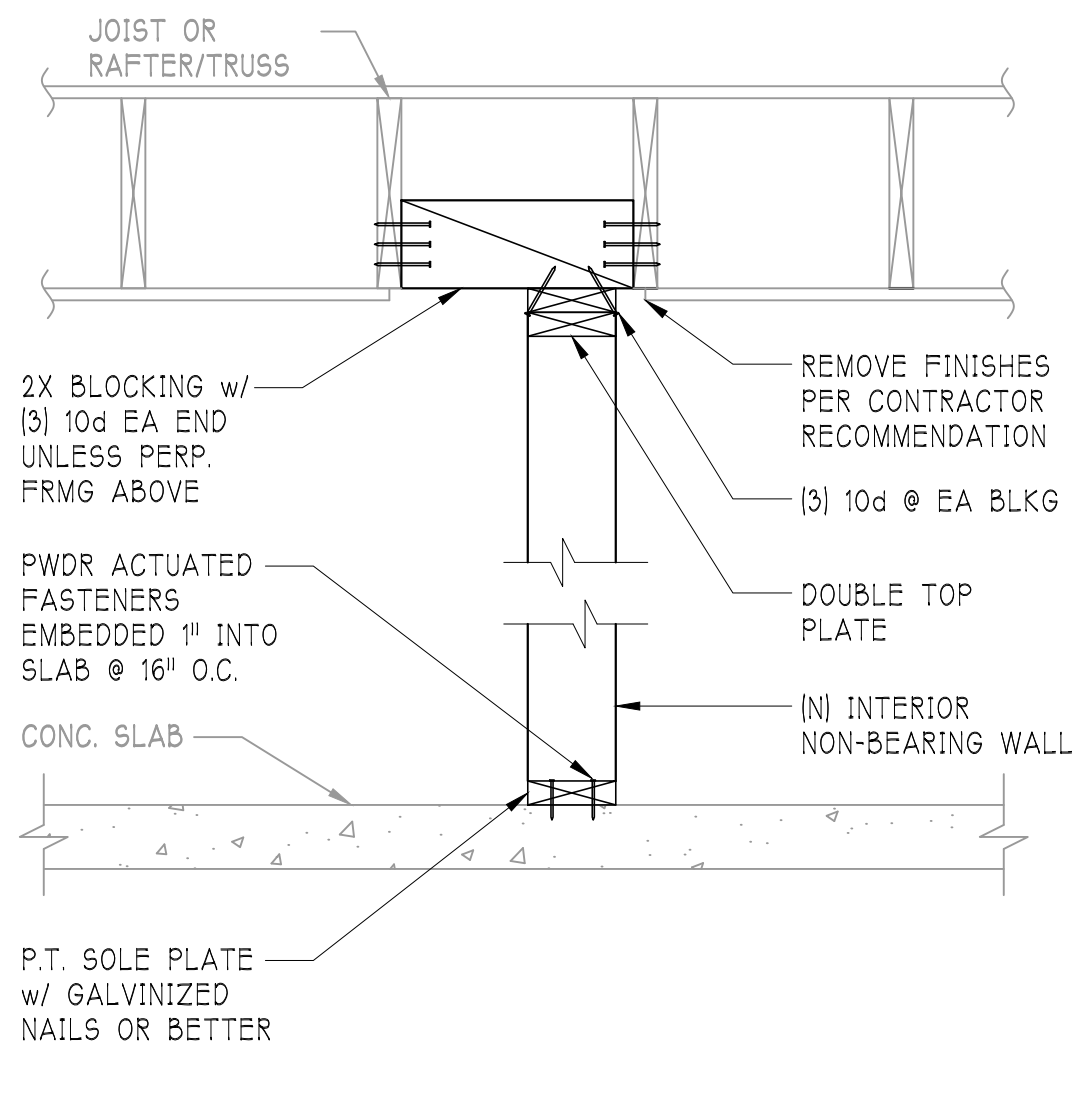
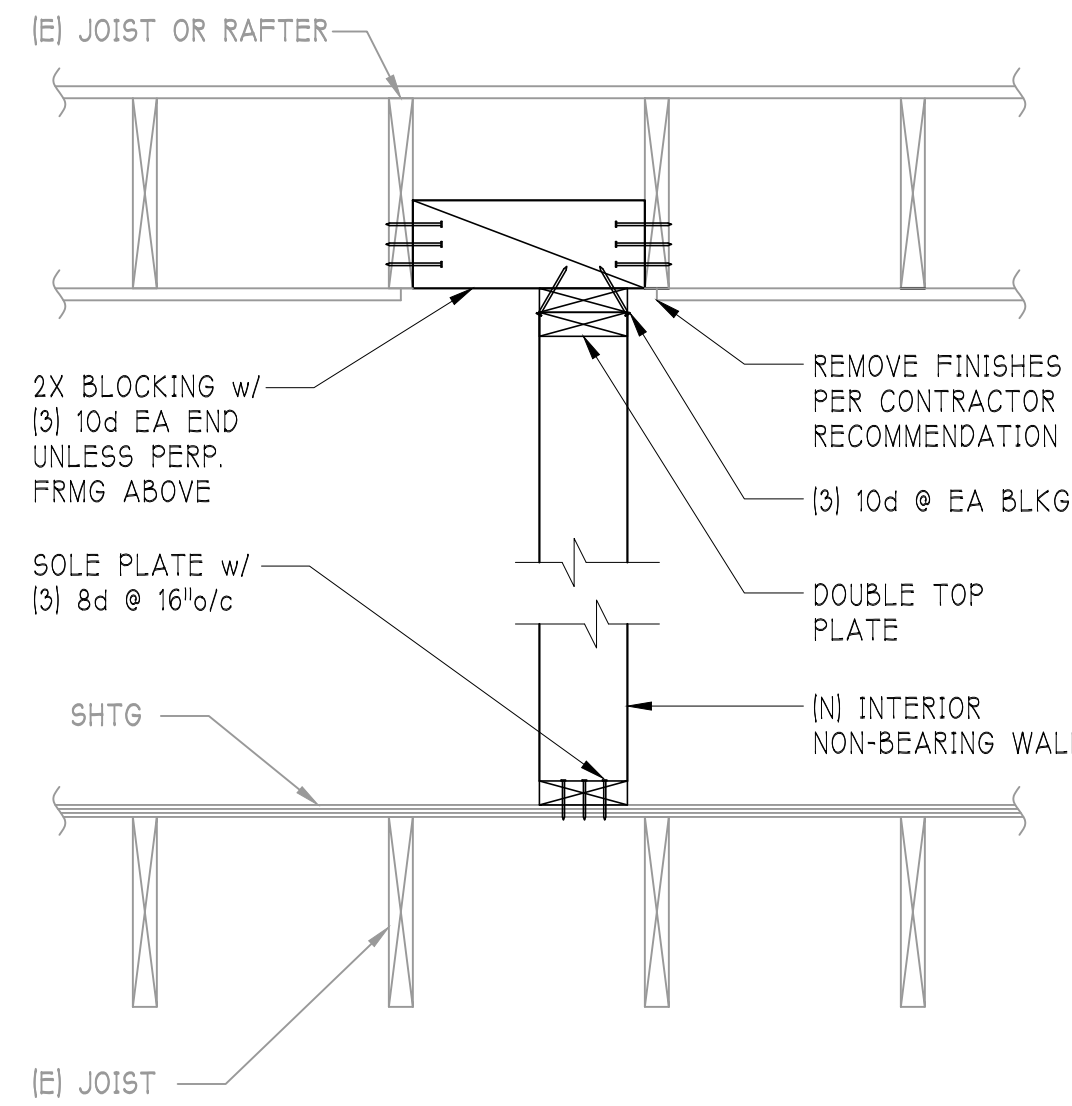
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MERCER ISLAND WA, 98040

BUILDING SECTIONS

| | |
|------------|--------|
| JOB NO. | 20-207 |
| HALF SCALE | 11x17 |
| FULL SCALE | 22x34 |

SHEET
A4.3

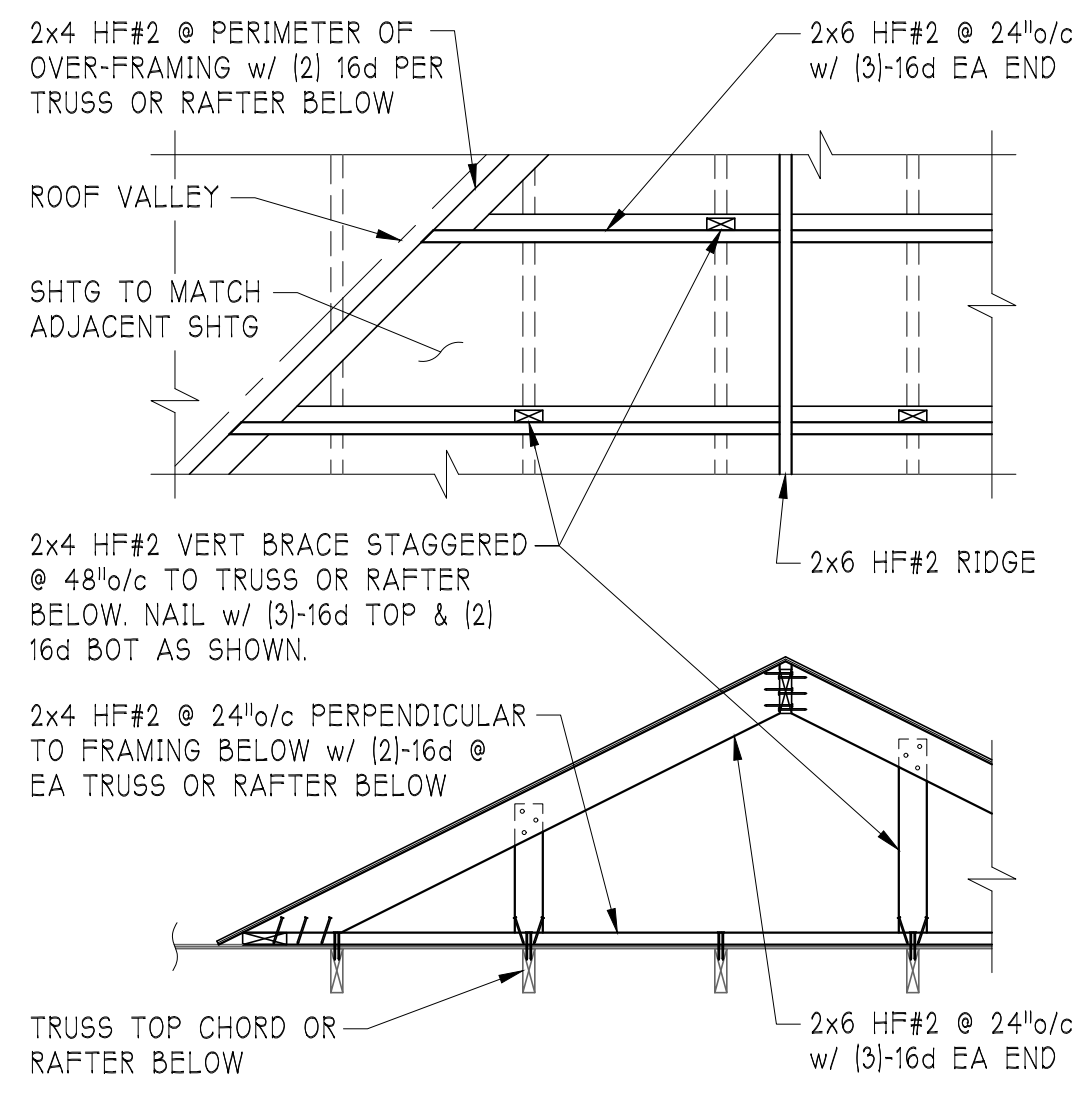
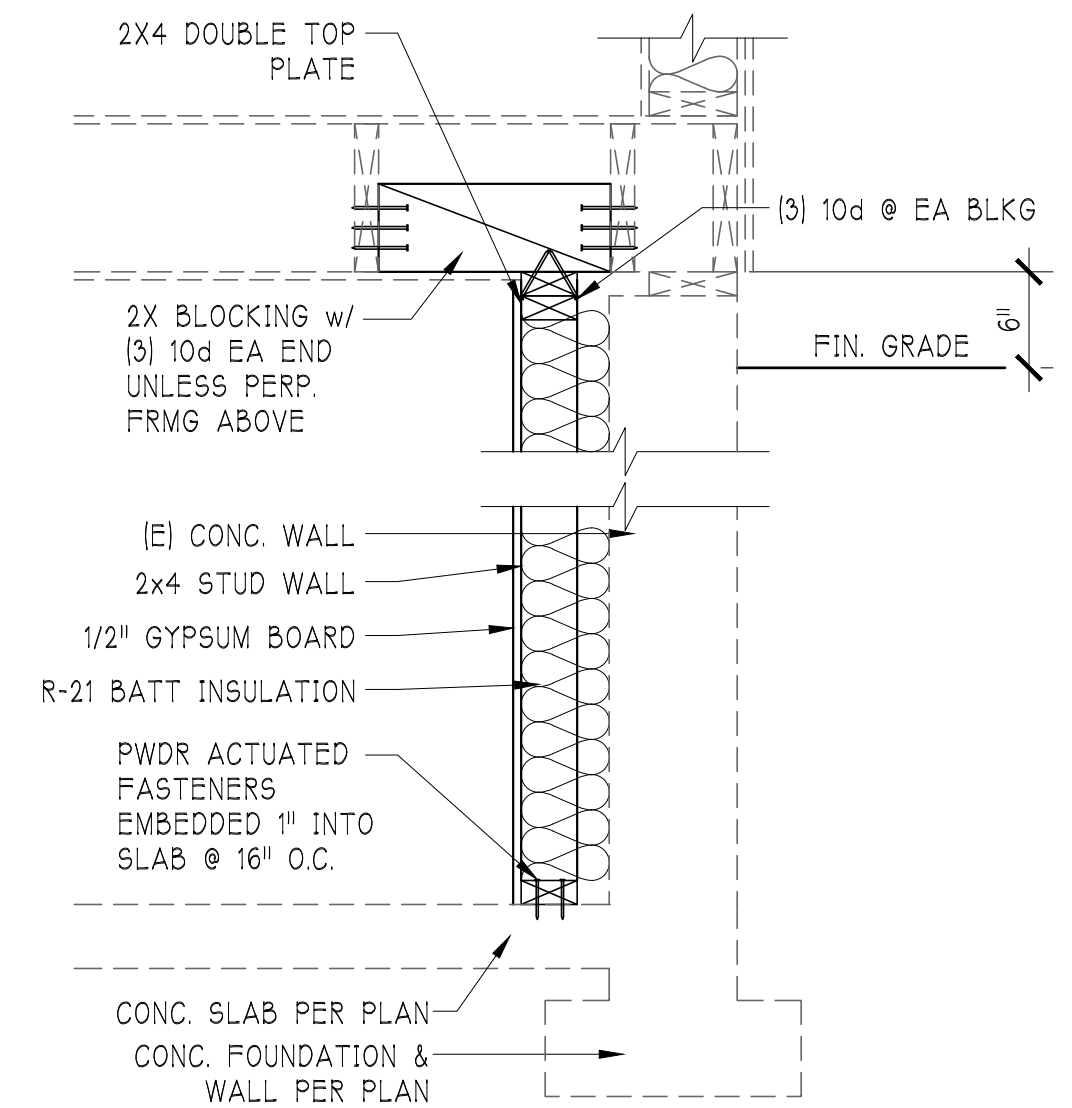


1 NEW INTERIOR WALL SECTION. OPENING FRAMING
A5.1 SCALE: 1"=1'-0"

2 WINDOW SECTION
A5.1 SCALE: 1/2"=1'-0"

3 WINDOW SECTION
A5.1 SCALE: 1"=1'-0"

4 INFILLED WINDOW SECTION
A5.1 SCALE: 1"=1'-0"

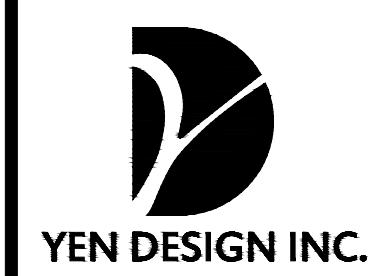


5 TYP. FURRED WALL SECTION
A5.1 SCALE: 1"=1'-0"

6 TYP. LARGE OVER-FRAMING DETAIL
A5.1 SCALE: 1/2"=1'-0"

STRUCTURAL ELEMENTS ARE FOR REFERENCE ONLY. IF DISCREPANCIES OCCUR, STRUCTURAL DRAWINGS GOVERN DESIGN.

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ARCHITECTURAL DETAILS

| | |
|------------|--------|
| JOB NO. | 20-207 |
| HALF SCALE | 11x17 |
| FULL SCALE | 22x34 |
| SHEET | |

A5.1

HOLD-DOWN SCHEDULE

| SYMBOL | SPECIFICATION |
|--------|---|
| ▶ HD-1 | SIMPSON HTT4 HOLD-DOWN |
| ▶ HD-5 | SIMPSON CS16 STRAP TIE (14" END LENGTH) |
| ▶ HD-7 | SIMPSON MSTG66 STRAP TIE (24" END LENGTH) |

* UTILIZE SIMPSON "SET-XP" EPOXY SYSTEM TO FASTEN 3/8" DIA. THREADED ROD INTO CONCRETE FOUNDATION. PROVIDE 10" MIN. EMBEDMENT INTO CONCRETE. INSTALL PER MANUF. RECOMMENDATIONS. DO NOT LOCATE ANCHORS WITHIN 1 3/4" OF EDGE OF FOUNDATION.

LOADING AND DESIGN PARAMETERS

| GRAVITY DESIGN LOADS: | |
|-----------------------------------|-----|
| DEAD LOAD (PSF): | |
| ROOF TRUSS TOP CHORD : | 10 |
| ROOF TRUSS BOTTOM CHORD : | 7 |
| FLOOR (1-JOIST) : | 10 |
| TILE FLOORS : | 10 |
| LIVE LOAD (PSF): | |
| ROOF : | 20 |
| RESIDENTIAL LIVING AREAS : | 40 |
| RESIDENTIAL SLEEPING AREAS : | 30 |
| RESIDENTIAL WOOD DECKS : | 60 |
| GARAGE : | 50 |
| SNOW LOAD: | |
| GROUND SNOW LOAD (P) (PSF) : | 25 |
| FLAT ROOF SNOW LOAD (P) (PSF) : | 25 |
| SNOW EXPOSURE FACTOR (Ce) : | 0.4 |
| SNOW LOAD IMPORTANCE FACTOR (I) : | 1.0 |
| THERMAL FACTOR (Ct) : | 1.2 |

| LATERAL DESIGN LOADS: | |
|-------------------------------------|--------------|
| WIND LOAD: (IBC 1609) | |
| SPEED (Vw) (MPH) : | 100 |
| WIND RISK CATEGORY : | II |
| IMPORTANCE FACTOR (Iw) : | 1.0 |
| EXPOSURE CATEGORY : | B/C |
| INTERNAL PRESSURE COEFF. (GCp) : | ±0.18 |
| TOPOGRAPHIC FACTOR (Kzt) : | 1.0 |
| SEISMIC LOAD: (IBC 1601) | |
| SEISMIC RISK CATEGORY : | II |
| SEISMIC IMPORTANCE FACTOR (Iw) : | 1.0 |
| MAPPED SPECTRAL RESPONSE : | See 1.4.6.1 |
| SITE CLASS : | D (DEFAULT) |
| SPECTRAL RESPONSE COEFF. : | See 1.1.7.5 |
| SEISMIC DESIGN CATEGORY : | D |
| BASIC SEISMIC FORCE-RESISTING SYS : | |
| LIGHT FRAMED WALLS : | |
| WOOD STRUCTURAL PANELS : | |
| ULTIMATE BASE SHEAR: | |
| TRANS: 4 k | LONGS: 4 k |
| SEISMIC RESPONSE COEFF. (Ca) : | |
| TRANS: 0.181 | LONGS: 0.181 |
| RESPONSE MODIFICATION FACTOR (R) : | |
| TRANS: 6.5 | LONGS: 6.5 |
| ANALYSIS PROCEDURE USED: | |
| EQUIVALENT LATERAL FORCE | |

MEANS & METHODS NOTES

THE STRUCTURE IS DESIGNED TO BE SELF SUPPORTING AND STABLE AFTER THE BUILDING IS FINISHED AND ALL PLAN, DETAIL, AND NOTE SPECIFICATIONS HAVE BEEN COMPLETED. IT IS THE CONTRACTOR'S SOLE RESPONSIBILITY TO DETERMINE THE ERECTION PROCEDURES AND SEQUENCE TO INSURE THE SAFETY OF THE BUILDING AND ITS COMPONENTS DURING CONSTRUCTION. THIS INCLUDES, BUT IS NOT LIMITED TO, THE ADDITION OF NECESSARY SHORING, SHEETING, TEMPORARY BRACING, GUYS, AND TIE-DOWNS. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL SHORING AND BRACING REQUIRED TO STABILIZE AND PROTECT EXISTING AND ADJACENT STRUCTURES AND SYSTEMS DURING COURSE OF DEMOLITION AND CONSTRUCTION OF THE PROJECT.

STRUCTURAL DESIGN AND SPECIFICATIONS ASSUME THAT ALL SUPPORTING AND NON-SUPPORTING ELEMENTS IN CONTACT WITH FLOOR FRAMING ARE LEVEL, INCLUDING, BUT NOT LIMITED TO; FOUNDATIONS, SLABS ON GRADE, BEAMS, WALLS, AND NON-BEARING ELEMENTS. IT IS THE CONTRACTOR'S RESPONSIBILITY TO VERIFY LEVELNESS AND MAKE ADJUSTMENTS AS NECESSARY, INCLUDING CONSIDERATION OF THOSE AREAS THAT MAY BE WITHIN CONTRACTUAL, INDUSTRY, OR WARRANTY TOLERANCES.

ADDITIONAL NOTES FOR TRUSS & I-JOIST MANUFACTURER

ROOF TRUSS, FLOOR TRUSS AND ENGINEERED JOISTS SHALL BE DESIGNED TO MEET THE DIFFERENTIAL DEFLECTION CRITERIA BELOW, UNLESS NOTED OTHERWISE ON PLAN. MULHERN & KULP CANNOT BE HELD RESPONSIBLE FOR ANY STRUCTURAL ISSUES RELATED TO ANY BUILDING COMPONENT IF COMPONENT SHOP DRAWINGS ARE NOT SUBMITTED TO MK FOR REVIEW PRIOR TO FABRICATION, DELIVERY, OR INSTALLATION.

TRUSSES SHALL BE DESIGNED SO THAT DIFFERENTIAL DEFLECTION BETWEEN ADJACENT PARALLEL TRUSSES OR GIRDER TRUSSES DOES NOT EXCEED THE FOLLOWING:

- ROOF TRUSSES, 1/4" DEAD LOAD
- FLOOR TRUSSES, ATTIC TRUSSES, & I-JOISTS, 1/8" DEAD LOAD
- FLOOR TRUSSES & ATTIC TRUSSES ADJACENT TO FLOOR FRAMING BY OTHERS, LIMIT ABSOLUTE TRUSS DEFLECTION TO 3/16" DEAD LOAD. (NOT DIFFERENTIAL DEFLECTION)

LATERAL BRACING NOTES

THIS ADDITION HAS BEEN ENGINEERED TO RESIST LATERAL FORCES RESULTING FROM: 100 MPH WIND SPEED, EXC. B/C (ASCE 7-16 WIND MAP, PER IBC R301.2.1.1) RISK CAT. 2 & SEISMIC CAT. D.

110 MPH WIND IN 2018 IRC MAP ENGINEERED DESIGN WAS COMPLETED PER 2018 IBC (SECTION 1609) & ASCE 7-16. AS PERMITTED BY R301.2.3 OF THE 2018 IRC, ACCORDINGLY, THIS MODEL, AS DOCUMENTED AND DETAILED HEREWITHIN, IS ADEQUATE TO RESIST THE CODE REQUIRED LATERAL FORCES, AND DOES NOT NEED TO CONFORM TO THE PRESCRIPTIVE PROVISIONS OF R602.10.

STANDARD EXTERIOR WALL SHEATHING SPECIFICATIONS

• 3/8" OSB OR 1/2" PLYWOOD:
FASTEN SHEATHING w/ 2 1/2"x0.131" NAILS @ 8" O.C. AT ALL SUPPORTED PANEL EDGES AND 12" O.C. IN THE PANEL FIELD. ALL SHEATHING SHEET PANEL EDGES SHALL OCCUR OVER WALL FRAMING MEMBERS OR 2x HORIZONTAL BLOCKING SHALL BE PROVIDED TO SUPPORT PANEL EDGE. ALL EXTERIOR WALLS SHALL BE CONSTRUCTED PER THIS SPECIFICATION UNLESS OTHERWISE NOTED.

3" O.C. EDGE NAILING (WHERE NOTED ON PLANS)

• 3/8" OSB OR 1/2" PLYWOOD:
ONLY AT LOCATIONS INDICATED ON PLANS - SHEATHING WALL SHOWN WITH 3/8" OSB. FASTEN SHEATHING w/ 2 1/2"x0.131" NAILS @ 3" O.C. AT EDGES AND 12" O.C. AT CENTER. ALL SHEATHING SHEET PANEL EDGES SHALL OCCUR OVER WALL FRAMING MEMBERS OR 2x HORIZONTAL BLOCKING SHALL BE PROVIDED TO SUPPORT PANEL EDGE AND 3" O.C. FASTENING.

- NOTES:**
- LATERAL ANALYSIS ASSUMES STUD SPACING @ 16" O.C.
 - ALL SHEAR WALLS SHALL HAVE DOUBLE TOP PLATES FASTENED TOGETHER w/ 3"x0.131" NAILS @ 8" O.C. USE (12) 3/8"x0.131" NAILS AT EACH LAP SPLICE, (6) EACH SIDE OF JOINT (TYP. UNO.)
 - ALL EXTERIOR WALLS ARE CONTINUOUSLY SHEATHED.
 - ALL INTERIOR SHEAR WALLS AND EXTERIOR WALLS ARE SHEATHED ABOVE AND BELOW OPENINGS.
 - WHERE OSB/PLYWOOD SHEATHING IS APPLIED TO BOTH FACES OF A SHEAR WALL, PANEL JOINT SHALL BE OFFSET TO FALL ON DIFFERENT FRAMING MEMBERS

LEGEND

- [Symbol] INTERIOR BEARING WALL
- [Symbol] BEARING WALL ABOVE (B.W.A.) OR SHEARWALL ABOVE (S.W.A.)
- [Symbol] BEAM / HEADER
- [Symbol] INTERIOR SHEAR WALL PANEL OR EXTERIOR SHEAR WALL w/ 3" O.C. EDGE NAILING
- [Symbol] INDICATES AREA OF ROOF OVERFRAMING
- JL METAL HANGER
- * INDICATES POST ABOVE. PROVIDE SOLID BLOCKING UNDER POST OR JAMB ABOVE.
- ▶ INDICATES HOLD-DOWN.

DEMOLITION/RENOVATION NOTES

- FRAMING AND FOUNDATION PLANS HAVE BEEN DESIGNED TO BE STRUCTURALLY SOUND UPON COMPLETION OF THE WORK. THE MEANS AND METHODS OF CONSTRUCTION ARE THE RESPONSIBILITY OF THE BUILDER/CONTRACTOR (UNLESS SPECIFICALLY NOTED ON PLANS).
- DURING DEMOLITION AND CONSTRUCTION, IT IS THE BUILDER/CONTRACTOR'S RESPONSIBILITY TO PROVIDE ADEQUATE TEMPORARY SHORING/BRACING OF EXISTING ELEMENTS INTENDED TO REMAIN.
- THE STRUCTURAL PLANS HAVE BEEN PREPARED WITH EXISTING FRAMING/FOUNDATION ASSUMPTIONS AS NOTED ON THE PLANS. IT IS THE BUILDER/CONTRACTOR'S RESPONSIBILITY TO CONTACT MK STRUCTURAL ENGINEERING IF ACTUAL SITE CONDITIONS VARY FROM WHAT IS DEPICTED ON THE CONSTRUCTION DOCUMENTS.

GENERAL STRUCTURAL NOTES

DESIGN PARAMETERS

- DESIGN IS BASED ON 2018 INTERNATIONAL RESIDENTIAL CODE & 2018 INTERNATIONAL EXISTING BUILDING CODE
- WOOD FRAME ENGINEERING IS BASED ON NDS, NATIONAL DESIGN SPECIFICATION FOR WOOD CONSTRUCTION - LATEST EDITION.

GENERAL FRAMING

- EXTERIOR BEARING WALLS SHALL BE 2x4 OR 2x6 (AS SHOWN ON PLANS) @ 16" O.C. (w/ DOUBLE TOP PLATE) HEM FIR (HF) "STUD" GRADE LUMBER, OR BETTER, UNO.
- INTERIOR BEARING WALLS SHALL BE 2x4 OR 2x6 (AS SHOWN ON PLANS) @ 16" O.C. (w/ DOUBLE TOP PLATE) HEM FIR (HF) "STUD" GRADE LUMBER, OR BETTER, UNO.
- ALL NON-BEARING INTERIOR STUD WALLS SHALL BE CONSTRUCTED WITH 2x STUD GRADE MEMBERS SPACED @ 24" O.C. (MAX.)
- ALL WALLS TALLER THEN TYP. PLATE HEIGHT SHALL BE CONSIDERED BALLOON FRAMED & SHALL BE CONSTRUCTED FROM FLOOR TO UNDERSIDE OF FRAMING AT NEXT LEVEL. BF WALLS SHALL BE 2x4 OR 2x6 (AS SHOWN ON PLANS) HEM FIR (HF) #2 GRADE LUMBER, OR BETTER.
- ALL HEADERS SHALL BE SUPPORTED BY (1)2x JACK STUD & (1)2x KING STUD, MINIMUM.
 - THE NUMBER OF STUDS SPECIFIED AT A SUPPORT INDICATES THE NUMBER OF JACK STUDS REQUIRED, UNO.
- ALL 2x6 AND LARGER SOLID SAWN BEAMS/HEADERS SHALL BE HEM FIR #2 (WF #2) OR BETTER. ALL 4x6 AND LARGER SOLID SAWN LUMBER SHALL BE DOUG FIR #2 (DF #2) OR BETTER.
- ALL FRAMING LUMBER SHALL BE KILN DRIED TO 19% MC (KD-15)
- ALL TYP. NAIL FASTENER REQUIREMENTS ARE NOTED IN GENERAL NOTES, IN DETAILS, OR ON PLANS. ALL WALLS SPECIFIED ARE MIN. DIAMETER AND LENGTH REQUIRED FOR CONNECTION. ALL HANGER NAILS SHALL BE INSTALLED PER MANUFACTURER'S REQUIREMENTS FOR MAX CHARTED CAPACITY. NOTE: HANGERS USE COMMON NAIL DIAMETERS NOT TYPICAL FRAMING GUN NAILS.
- FASTEN ALL BEAMS TO COLUMNS w/ (4) 3"x0.131" TOENAILS (MIN), TYP. UNO.
- PROVIDE SOLID BLOCKING IN FLOOR SYSTEM UNDER ALL POSTS & HOLD-DOWNS CONTINUOUS TO FOUNDATION/BEARING. BLOCKING TO MATCH POST ABOVE.
- ENGINEERED LUMBER TO MEET OR EXCEED THE FOLLOWING:
 - LSL MEMBERS - Fd=2325 Psl, Fv=310 Psl, E=1.55x10⁶ Psl
 - LVL MEMBERS - Fd=2600 Psl, Fv=285 Psl, E=2.0x10⁶ Psl
 - GLB MEMBERS - Fd=2400 Psl, Fv=265 Psl, E=1.8x10⁶ Psl, DF/DF
- ENGINEERED LUMBER POSTS TO MEET OR EXCEED THE FOLLOWING:
 - LVL MEMBERS - Fd=2400 Psl, Fc=2500 Psl, E=1.8x10⁶ Psl
- FACE NAIL MULTI-PLY 2x BEAMS & HEADERS w/ 3-ROWS OF 3"x0.131" NAILS (MIN) @ 12" O.C. STAGGERED. APPLY NAILING FROM BOTH FACES @ 3-PLY OR MORE CONDITIONS. UTILIZE 2 ROWS OF NAILS FOR 2x6 & 2x8 MEMBERS.
- ALL MEMBERS SPECIFIED AS MULTI-PLY (½") SHALL BE FASTENED TOGETHER PER MANUFACTURER. EQUIVALENT WIDTH SOLID MATERIAL MAY BE USED AS EQUAL.
- FASTEN 2x WOOD PLATES TO TOP FLANGE OF STEEL BEAMS w/ PAFs (HILT) X-L PINS OR EQUAL (0.51" DIA. x 2" LONG MIN) @ 16" O.C. STAGGERED, OR 1/2" DIA. BOLTS @ 48" O.C. STAGGERED.
- REFER TO IRC FASTENING SCHEDULE TABLE R602.3(1) FOR ALL CONNECTIONS, TYP. UNO.

FLOOR FRAMING

- I-JOISTS/TRUSSES SHALL BE DESIGNED BY MANUF. TO MEET OR EXCEED L1480 LIVE LOAD DEFLECTION CRITERIA AND SHALL RUN CONTINUOUS OVER SUPPORTS WHEREVER POSSIBLE. ALL LOADS SHOWN ON PLAN FOR MANUF. DESIGNS ARE ASD LEVEL LOADS, UNO. (EXCLUDES STONE/MARBLE OR WET BED CONSTRUCTED FLOORS - CONTACT MK FOR EXCLUDED DESIGNS).
- ALL METAL I-JOIST/TRUSS HANGERS SHALL BE SPECIFIED BY I-JOIST/TRUSS MANUFACTURER, UNLESS OTHERWISE NOTED.
- I-JOIST/TRUSS SHOP DRAWINGS SHALL BE SUBMITTED TO ARCHITECT AND ENGINEER FOR REVIEW AND APPROVAL PRIOR TO FABRICATION OR DELIVERY.
- FLOOR SHEATHING SHALL BE 23/32" A.P.A. RATED "STUD-I-FLOOR" 24" O.C. EXPOSURE 1 (OR APPROVED EQUAL) WITH TONGUE AND GROOVE EDGES. FASTEN TO FRAMING MEMBERS w/ GUE AND 2 1/2" x 0.131" NAILS @ 6" O.C. @ PANEL EDGES & @ 12" O.C. FIELD.
- ALL FLUSH CONNECTIONS SHALL BE CONNECTED WITH HANGER APPROPRIATE FOR MEMBER SIZE, UNO.
- FASTEN HANGERS TO SINGLE PLY FUSH BEAMS w/ 1/2" LONG NAILS.

ROOF FRAMING

- FASTEN EACH ROOF TRUSS TO TOP PLATE w/ (3) 3"x0.131" TOENAILS (MIN) & (1) SIMPSON H2.5T CLIP @ ALL BEARING POINTS. PROVIDE (2) SIMPSON H2.5T CLIPS AT 2-PLY GIRDER TRUSSES & 3-PLY GIRDER TRUSSES AT ALL BEARING POINTS.
- ROOF SHEATHING SHALL BE 7/16" A.P.A. RATED SHEATHING 24/16 EXPOSURE 1 (OR APPROVED EQUAL). FASTEN TO FRAMING MEMBERS w/ 2 1/2" x 0.131" NAILS @ 6" O.C. AT PANEL EDGES & @ 12" O.C. AT INTERMEDIATE SUPPORTS. ROOF SHEATHING SHALL EXTEND BELOW ALL INSTANCES OF OVERFRAMING. BLOCKING SHALL BE INSTALLED AS REQUIRED TO LIMIT ROOF SHEATHING SPANS TO 24" MAX.
- ALL METAL HANGERS SHALL BE SPECIFIED BY THE TRUSS MANUFACTURER, UNLESS OTHERWISE NOTED.
- ROOF TRUSS SHOP DRAWINGS SHALL BE SUBMITTED TO ARCHITECT AND ENGINEER FOR REVIEW AND APPROVAL PRIOR TO FABRICATION OR DELIVERY.
- ROOF TRUSS SHOP DRAWINGS & CALCULATIONS SHALL BE PREPARED BY A WASHINGTON STATE LICENSED ENGINEER AND SHALL BE DESIGNED FOR UNBALANCED SNOW LOADING PER ASCE7-10, SECTION 7.6.
- ERECT AND INSTALL ROOF TRUSSES PER WTCA & TP's BC51 I-08 "GUIDE TO GOOD PRACTICE FOR HANDLING, INSTALLING & BRACING OF METAL PLATE CONNECTED WOOD TRUSSES".
- FASTEN OVER-FRAMED TRUSS SETS TO TRUSSES BELOW w/ (2) 3"x0.131" TOENAILS AT EA. TRUSS.
- SUPPORT PORCH & SHORT SPAN ROOF TRUSSES (UP TO 6' TRUSS) w/ 2x6 LEDGER FASTENED TO FRAMING w/ (3) 3"x0.131" NAILS @ 16" O.C.
- FASTEN ALL INTERIOR NON-BEARING PARTITION WALLS TO TRUSS BOTTOM CHORD ABOVE WITH SIMPSON STC CLIPS AT 24" O.C. MAX. PROVIDE BLOCKING BETWEEN THE TRUSS BOTTOM CHORDS AS REQUIRED FOR THE PARALLEL CONDITIONS.

seal:



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M&K project number:
251-21001

project mgr: **NJM**
drawn by: **RJD**
issue date: **01-27-21**

| REVISIONS: | |
|-------------|----------|
| date: | initial: |
| 03-23-21 | RJD |
| 06-08-21 | RJD |
| CODE UPDATE | |

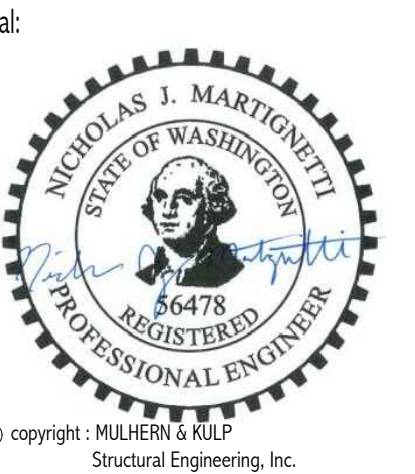
YEN DESIGN

STRUCTURAL NOTES

7511 SE 76TH
MERCER ISLAND, WASHINGTON

sheet:

S-0.0



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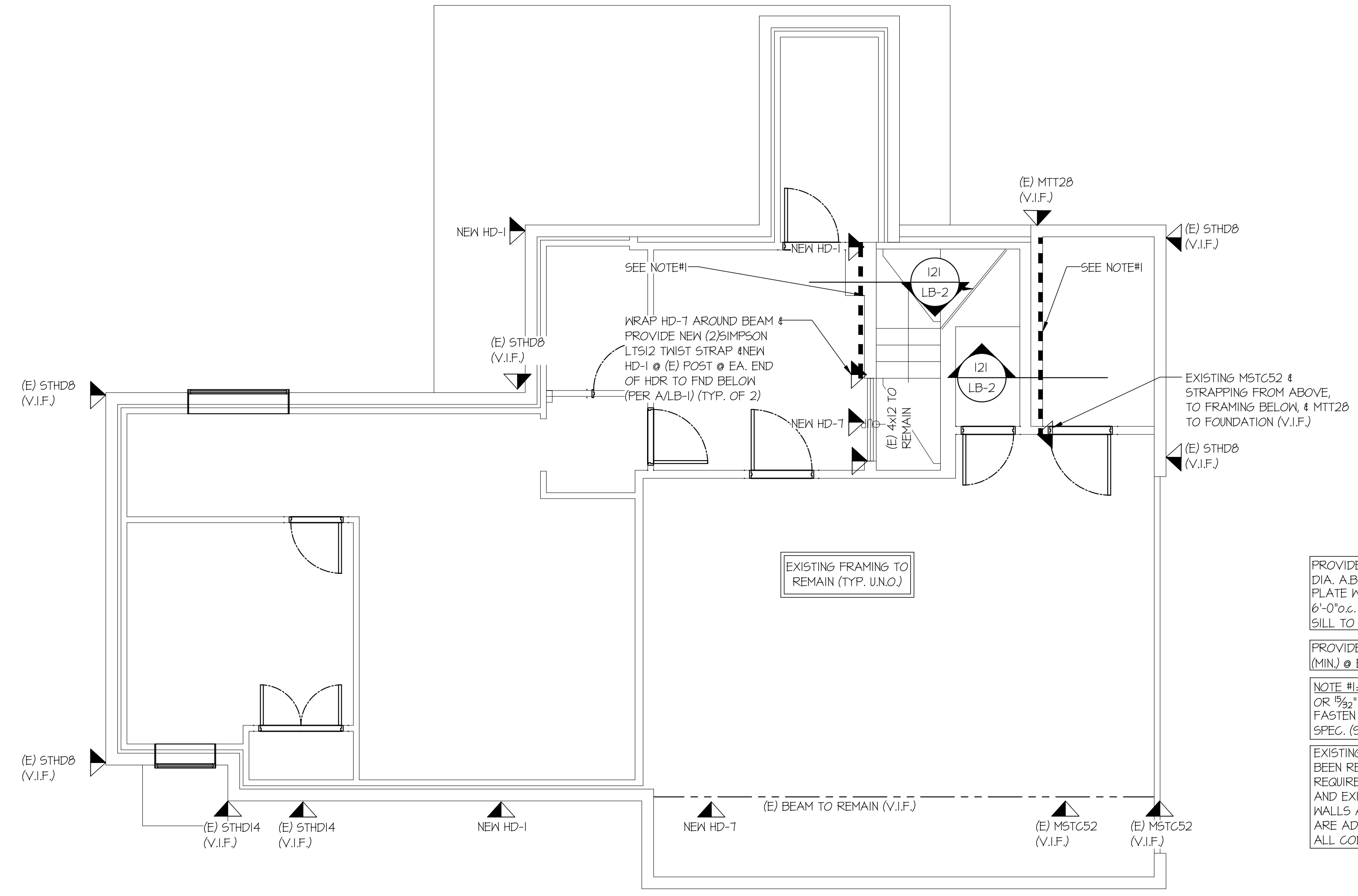
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1ST FLOOR FRAMING PLAN
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PROVIDE/VERIFY 1/2" DIA. A.B. w/ 3"x3"x1/4" PLATE WASHERS @ 6'-0" o.c. (MAX.) FROM SILL TO FND.

PROVIDE/VERIFY (2) 2x (MIN.) @ EA. EXIST. HD

NOTE #1: PROVIDE INT. 3/16" OSB OR 3/2" PLYWOOD SHT'G & FASTEN PER TYP. EXT. SHT'G. SPEC. (SEE S-0.0)

EXISTING FND PLANS HAVE BEEN REVIEWED FOR MINIMUM REQUIRED REINFORCEMENT AND EXISTING FOUNDATION WALLS AND FOOTING SIZES ARE ADEQUATE TO SUPPORT ALL CODE REQUIRED LOADS

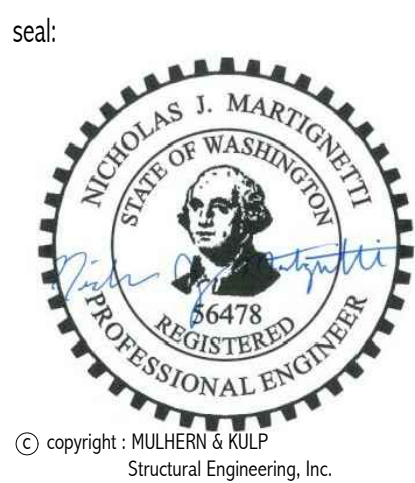
| HOLD-DOWN SCHEDULE | |
|--------------------|---|
| SYMBOL | SPECIFICATION |
| ▶ HD-1 | SIMPSON HIT4 HOLD-DOWN |
| ▶ HD-5 | SIMPSON CS16 STRAP TIE (14" END LENGTH) |
| ▶ HD-7 | SIMPSON M5TC66 STRAP TIE (24" END LENGTH) |

* UTILIZE SIMPSON "SET-XP" EPOXY SYSTEM TO FASTEN 3/8" DIA. THREADED ROD INTO CONCRETE FOUNDATION. PROVIDE 10" MIN. EMBEDMENT INTO CONCRETE. INSTALL PER MANUF. RECOMMENDATIONS. DO NOT LOCATE ANCHORS WITHIN 1 3/4" OF EDGE OF FOUNDATION.

| LEGEND | |
|--------|--|
| ◻ | INTERIOR BEARING WALL |
| ◻ | BEARING WALL ABOVE (B.W.A.) OR SHEARWALL ABOVE (S.W.A.) |
| — | BEAM / HEADER |
| --- | INTERIOR SHEAR WALL PANEL OR EXTERIOR SHEAR WALL w/ 3" o.c. EDGE NAILING |
| ••••• | INDICATES AREA OF ROOF OVERFRAMING |
| JL | METAL HANGER |
| * | INDICATES POST ABOVE. PROVIDE SOLID BLOCKING UNDER POST OR JAMB ABOVE. |
| ▶ | INDICATES HOLD-DOWN. |

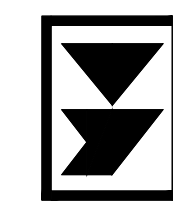
REFER TO S-0.0 FOR TYPICAL STRUCTURAL NOTES & SCHEDULES

1ST FLOOR FRAMING PLAN
SCALE: 1/4"=1'-0"



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M&K project number:
251-21001

project mgr: **NJM**
drawn by: **RJD**
issue date: **01-27-21**

REVISIONS:

| date: | initial: |
|-------------|----------|
| 03-23-21 | RJD |
| 06-08-21 | RJD |
| CODE UPDATE | RJD |

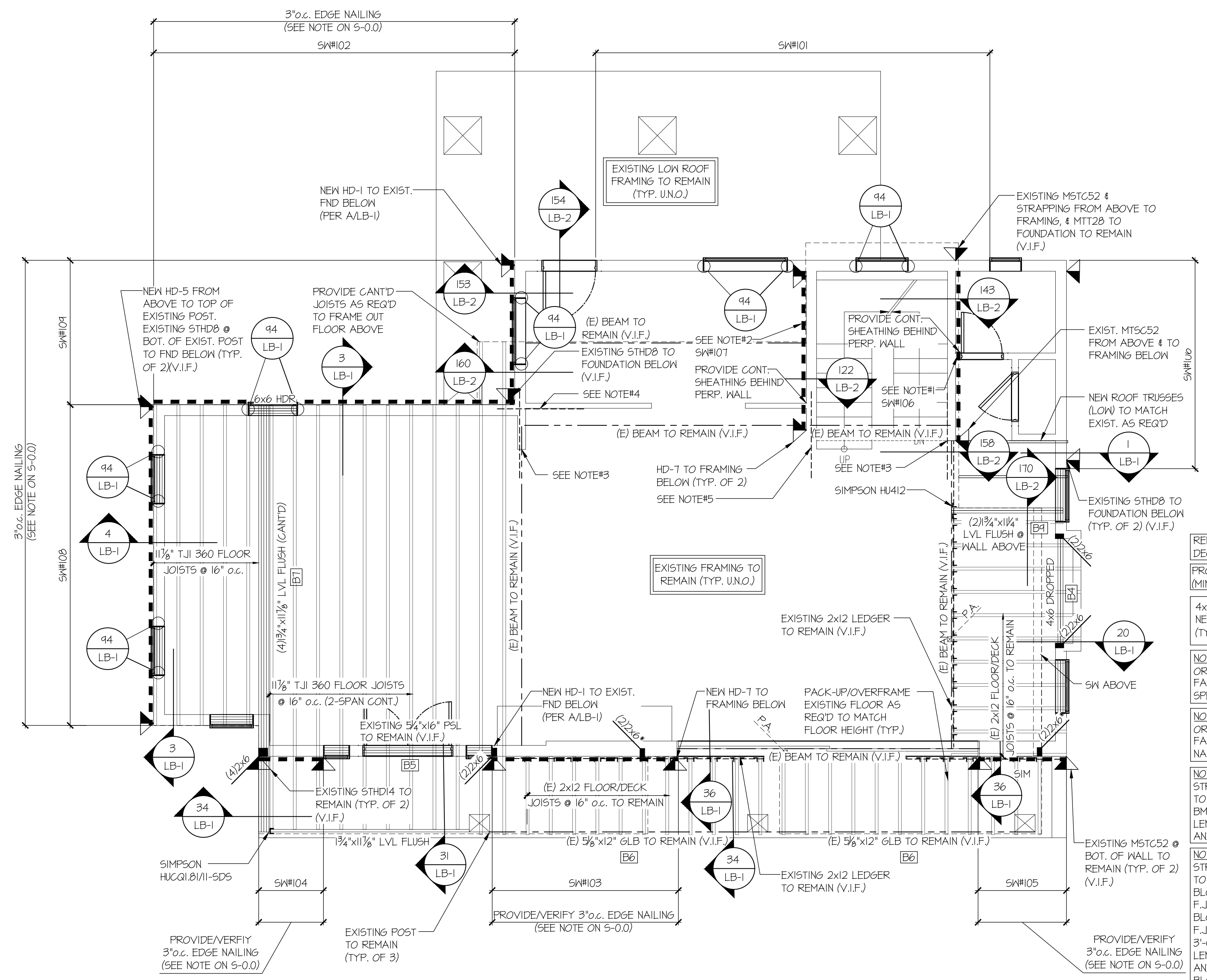
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2ND FLOOR FRAMING PLAN

7511 SE 76TH
MERCER ISLAND, WASHINGTON

sheet:

S-2.0



REMOVE EXISTING DECK JOISTS (TYP.)
PROVIDE/VERIFY (2)2x (MIN.) @ EA. EXIST. HD

4x6 MIN HDR @ ALL NEW EXT. OPENINGS (TYP. UN.O.) [B2]

NOTE #1: PROVIDE INT. 1/8" OSB OR 3/8" PLYWOOD SHTG & FASTEN PER TYP. EXT. SHTG. SPEC. (SEE 5-0.0)

NOTE #2: PROVIDE INT. 3/8" OSB OR 3/8" PLYWOOD SHTG & FASTEN PER 3" o.c. EDGE NAILING SPEC. (SEE 5-0.0)

NOTE #3: PROVIDE CS16 STRAP FROM DBL TOP PLATE TO UNDERSIDE OF EXISTING BM. PROVIDE 13" MIN. END LENGTH ON DBL TOP PLATE AND BM.

NOTE #4: PROVIDE CS16 STRAP FROM DBL TOP PLATE TO UNDERSIDE OF NEW 2x BLOCKING BETWEEN EXIST. F.J. PROVIDE FULL DEPTH 2x BLOCKING BETWEEN EXIST. F.J. FOR FIRST (3) BAYS OR 3'-0" MIN. PROVIDE 13" END LENGTH ON DBL TOP PLATE AND 3'-0" END LENGTH ON BLOCKING.

NOTE #5: PROVIDE CS16 STRAP FROM DBL TOP PLATE TO UNDERSIDE OF NEW 2x BLOCKING BETWEEN EXIST. F.J. PROVIDE 2x FLAT BLOCKING BETWEEN EXIST. F.J. BOTTOM CHORDS FOR 3'-0" MIN. PROVIDE 13" END LENGTH ON DBL TOP PLATE AND 3'-0" END LENGTH ON BLOCKING.

HOLD-DOWN SCHEDULE

| SYMBOL | SPECIFICATION |
|--------|---|
| ▶ HD-1 | SIMPSON HIT4 HOLD-DOWN |
| ▶ HD-5 | SIMPSON CS16 STRAP TIE (14" END LENGTH) |
| ▶ HD-7 | SIMPSON MSTC66 STRAP TIE (24" END LENGTH) |

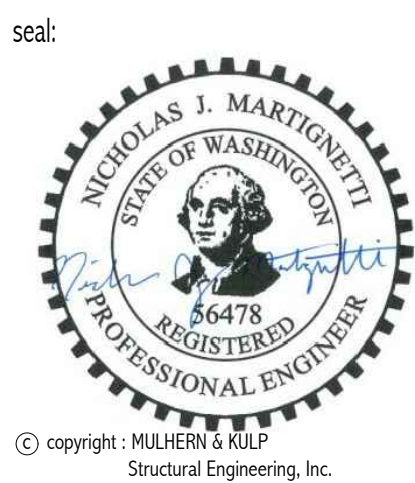
* UTILIZE SIMPSON "SET-XP" EPOXY SYSTEM TO FASTEN 3/8" DIA. THREADED ROD INTO CONCRETE FOUNDATION. PROVIDE 10" MIN. EMBEDMENT INTO CONCRETE. INSTALL PER MANUF. RECOMMENDATIONS. DO NOT LOCATE ANCHORS WITHIN 1 3/4" OF EDGE OF FOUNDATION.

LEGEND

- ◻ INTERIOR BEARING WALL
- ◻ BEARING WALL ABOVE (B.W.A.) OR SHEARWALL ABOVE (S.W.A.)
- BEAM / HEADER
- INTERIOR SHEAR WALL PANEL OR EXTERIOR SHEAR WALL w/ 3" o.c. EDGE NAILING
- INDICATES AREA OF ROOF OVERFRAMING
- JL METAL HANGER
- * INDICATES POST ABOVE. PROVIDE SOLID BLOCKING UNDER POST OR JAMB ABOVE.
- ▶ INDICATES HOLD-DOWN.

2ND FLOOR FRAMING PLAN
SCALE: 1/4"=1'-0"

REFER TO 5-0.0 FOR TYPICAL STRUCTURAL NOTES & SCHEDULES



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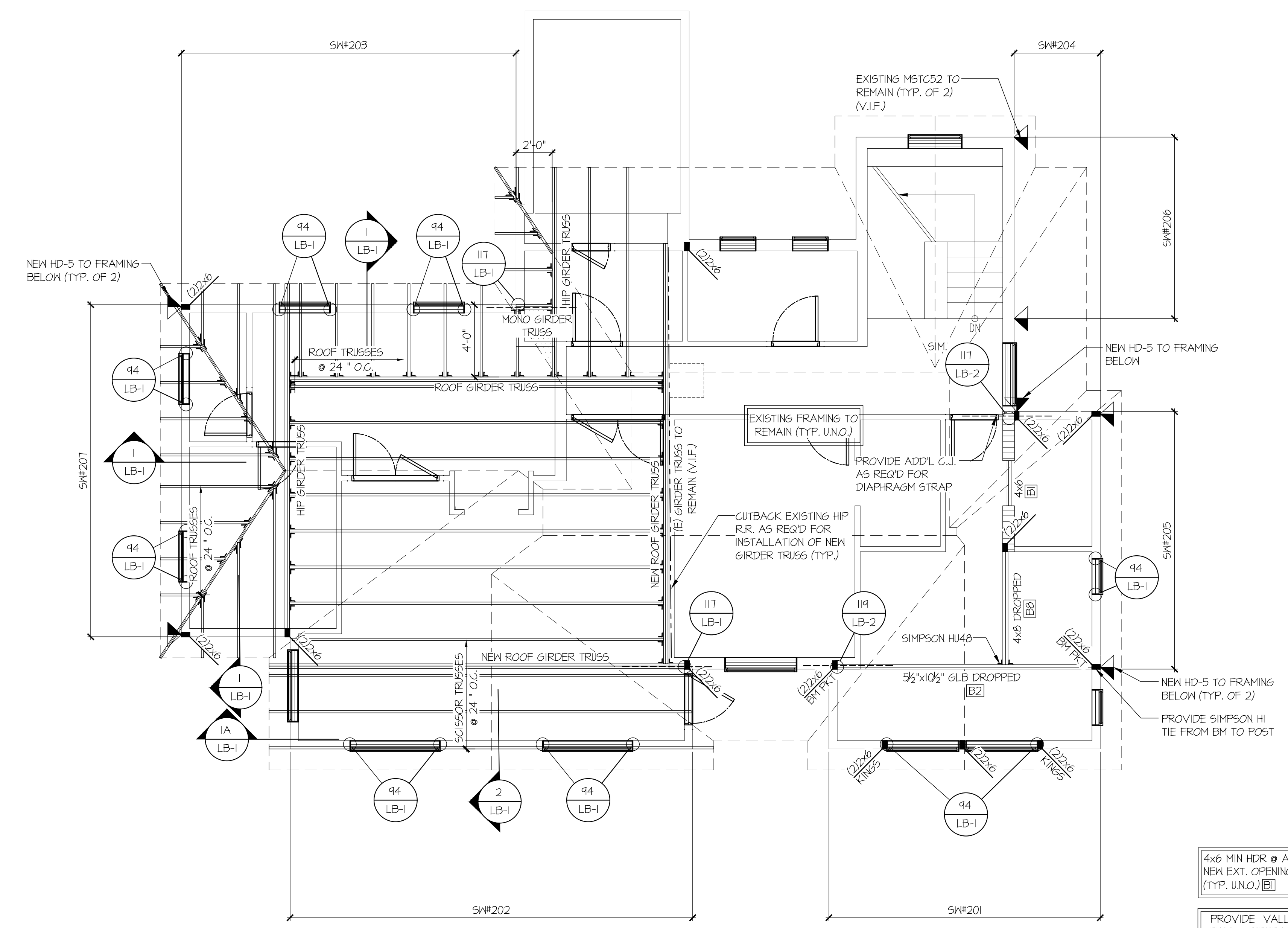
M&K project number: 251-21001
project mgr: NJM
drawn by: RJD
issue date: 01-27-21

REVISIONS:
date: initial:
03-23-21 RJD
ARCH REVISIONS
06-08-21 RJD
CODE UPDATE

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ROOF FRAMING PLAN
7511 SE 76TH
MERCER ISLAND, WASHINGTON

sheet: **S-3.0**



1 ROOF FRAMING PLAN
SCALE: 1/4"=1'-0"

4x6 MIN HDR @ ALL NEW EXT. OPENINGS (TYP. U.N.O.)

PROVIDE VALLEY TRUSS OVERFRAMING AS REQ'D (TYP.)

| HOLD-DOWN SCHEDULE | |
|--------------------|---|
| SYMBOL | SPECIFICATION |
| | SIMPSON HIT4 HOLD-DOWN |
| | SIMPSON CS16 STRAP TIE (14" END LENGTH) |
| | SIMPSON MSTC66 STRAP TIE (24" END LENGTH) |

* UTILIZE SIMPSON "SET-XP" EPOXY SYSTEM TO FASTEN 3/8" DIA. THREADED ROD INTO CONCRETE FOUNDATION. PROVIDE 10" MIN. EMBEDMENT INTO CONCRETE. INSTALL PER MANUF. RECOMMENDATIONS. DO NOT LOCATE ANCHORS WITHIN 1 3/4" OF EDGE OF FOUNDATION.

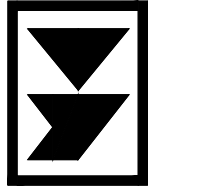
| LEGEND | |
|--------|--|
| | INTERIOR BEARING WALL |
| | BEARING WALL ABOVE (B/W/A), OR SHEARWALL ABOVE (S/W/A) |
| | BEAM / HEADER |
| | INTERIOR SHEAR WALL PANEL OR EXTERIOR SHEAR WALL w/ 3" O.C. EDGE NAILING |
| | INDICATES AREA OF ROOF OVERFRAMING |
| | JL METAL HANGER |
| | * INDICATES POST ABOVE. PROVIDE SOLID BLOCKING UNDER POST OR JAMB ABOVE. |
| | INDICATES HOLD-DOWN. |

REFER TO S-0.0 FOR TYPICAL STRUCTURAL NOTES & SCHEDULES



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project mgr: **NJM**
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issue date: **01-27-21**

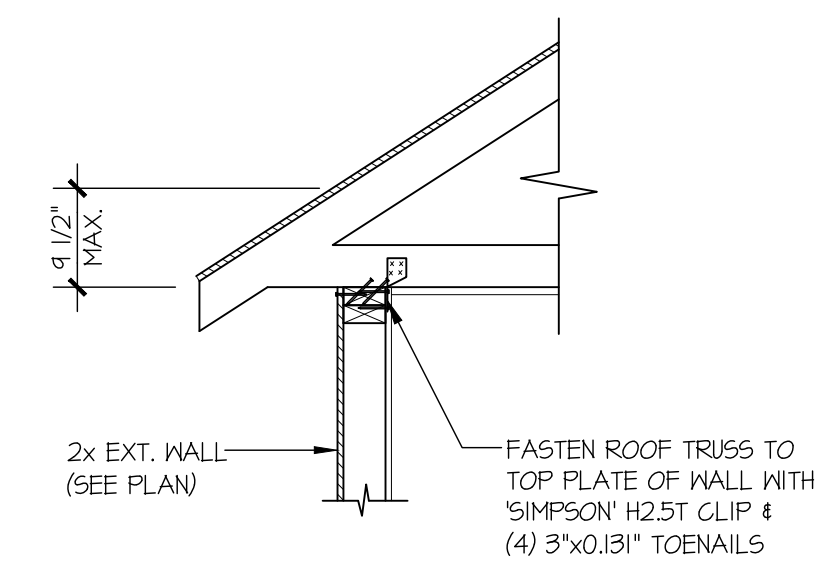
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| 06-08-21 | RJD |
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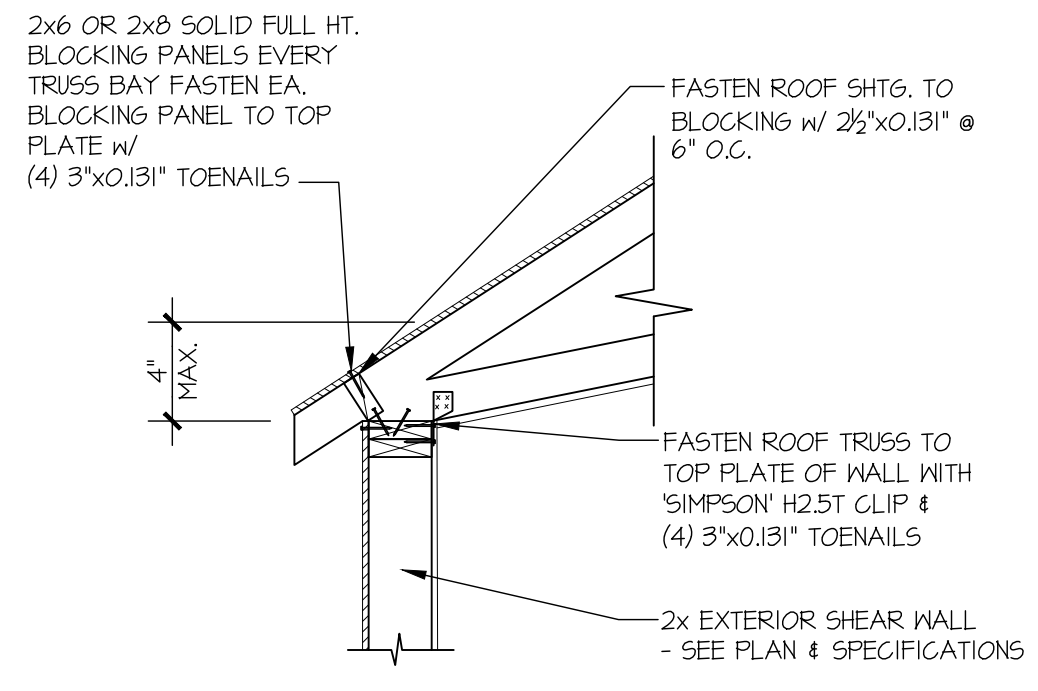
LATERAL BRACING DETAILS

7511 SE 76TH
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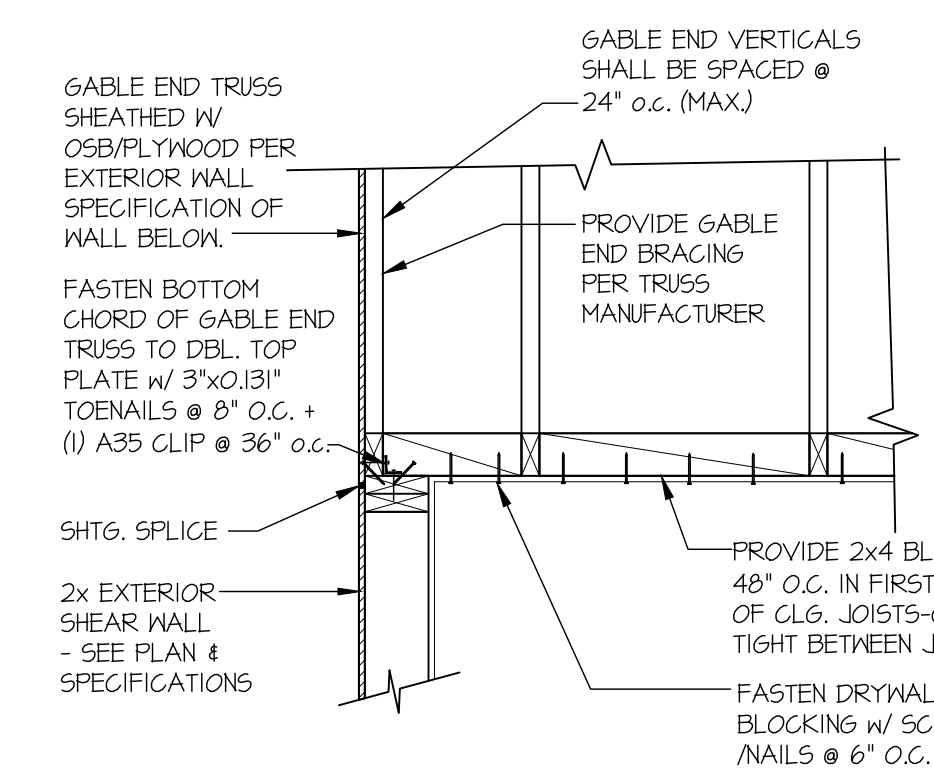
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LB-1



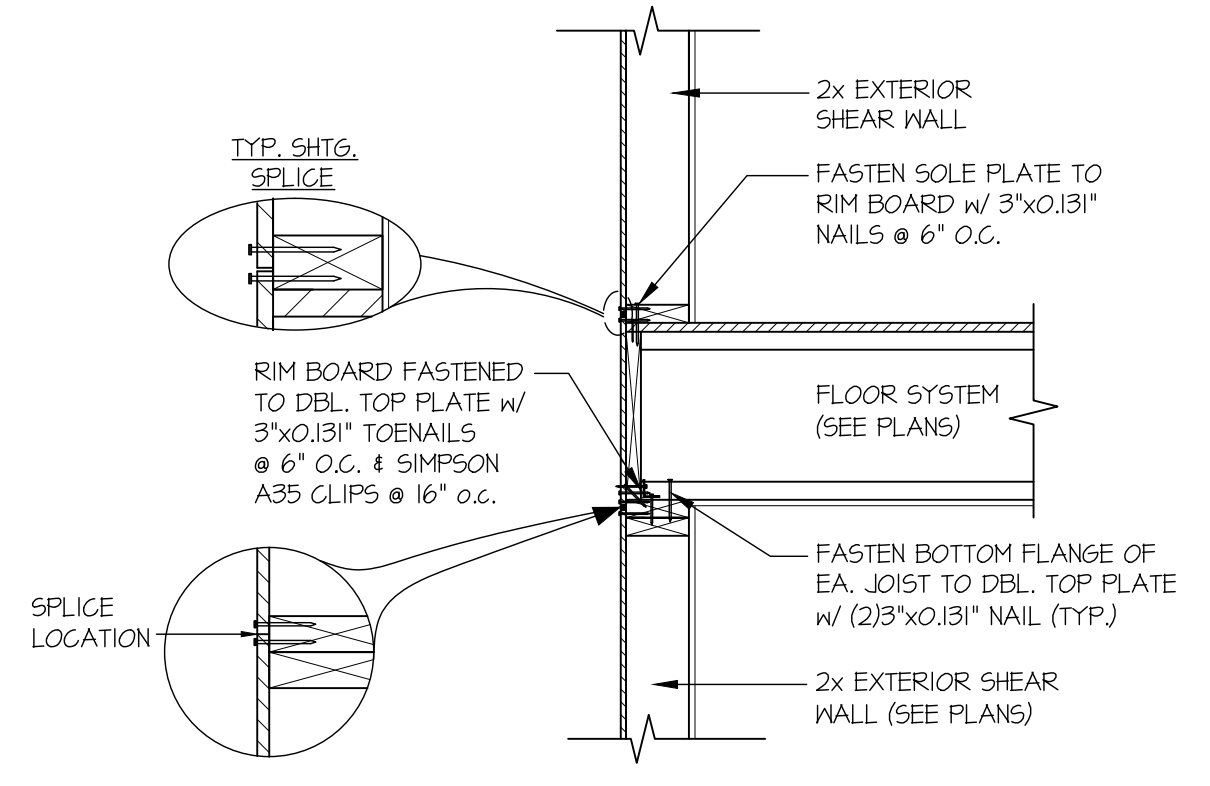
1 TYPICAL SHEAR TRANSFER DETAIL @ ROOF
SCALE: 3/4"=1'-0"
HEEL HEIGHT LESS THAN 1 1/2" NO BLOCKING REQ'D



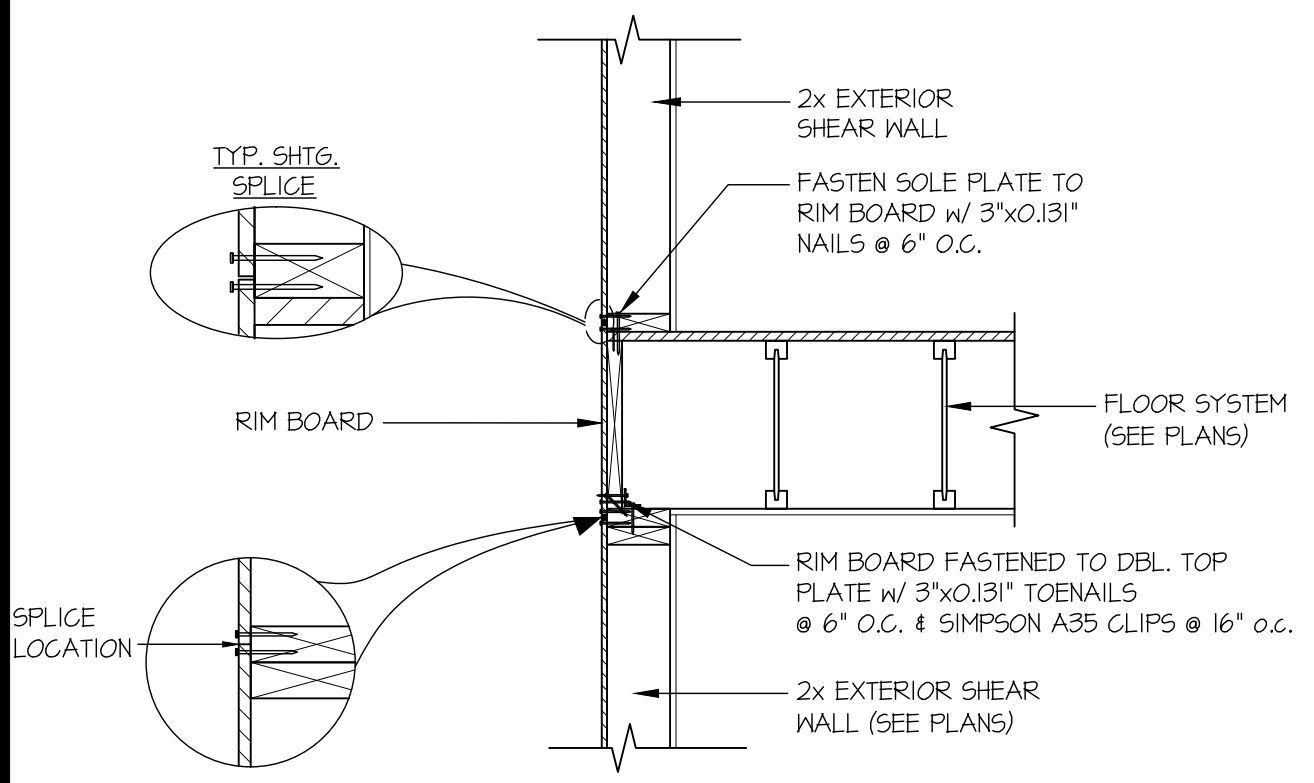
1A TYPICAL SHEAR TRANSFER DETAIL @ VAULTED CEILING
SCALE: 3/4"=1'-0"



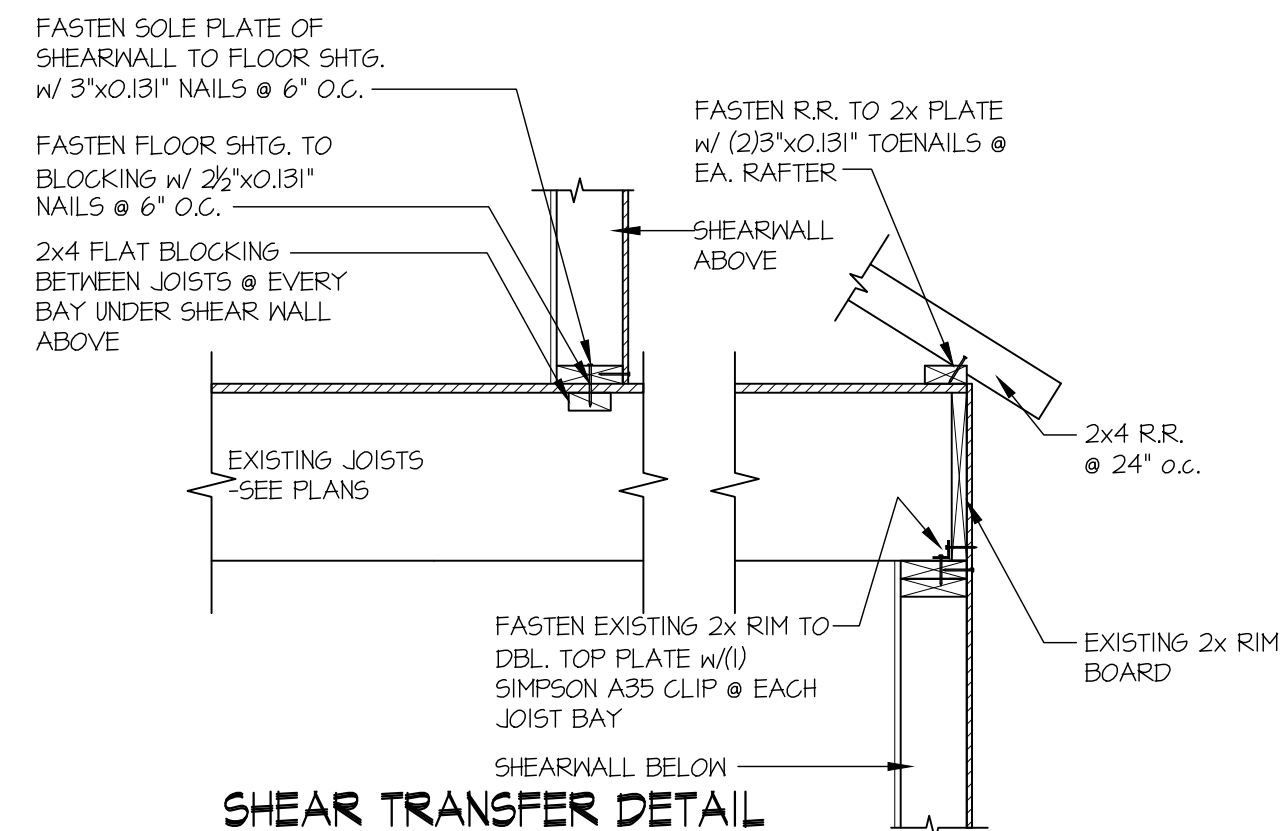
2 TYPICAL GABLE END DETAIL
SCALE: 3/4"=1'-0"



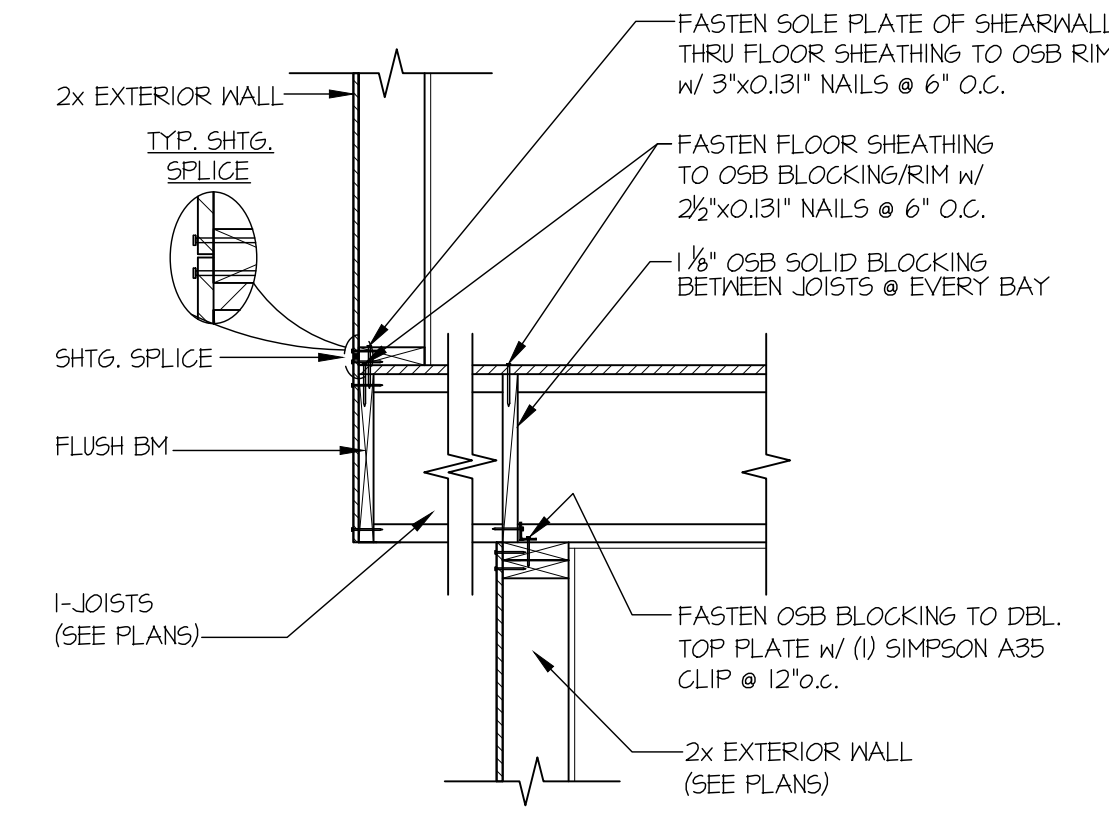
3 TYPICAL SHEAR TRANSFER DETAIL BETWEEN FLOORS @ EXTERIOR WALL
SCALE: 3/4"=1'-0" PERPENDICULAR FRAMING



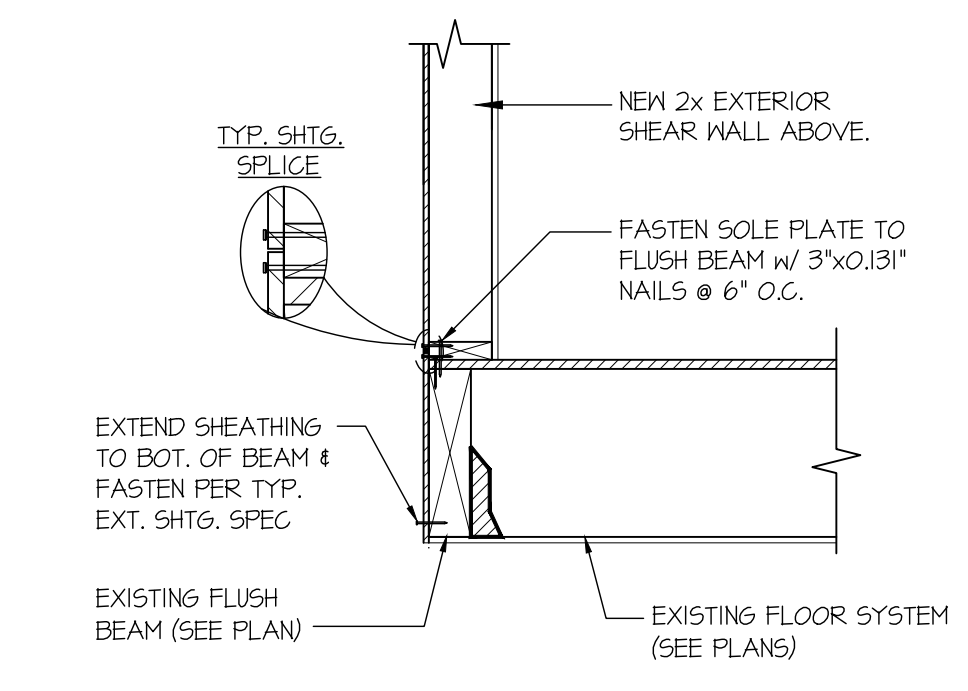
4 TYPICAL SHEAR TRANSFER DETAIL BETWEEN FLOORS @ EXTERIOR WALL
SCALE: 3/4"=1'-0" PARALLEL FRAMING



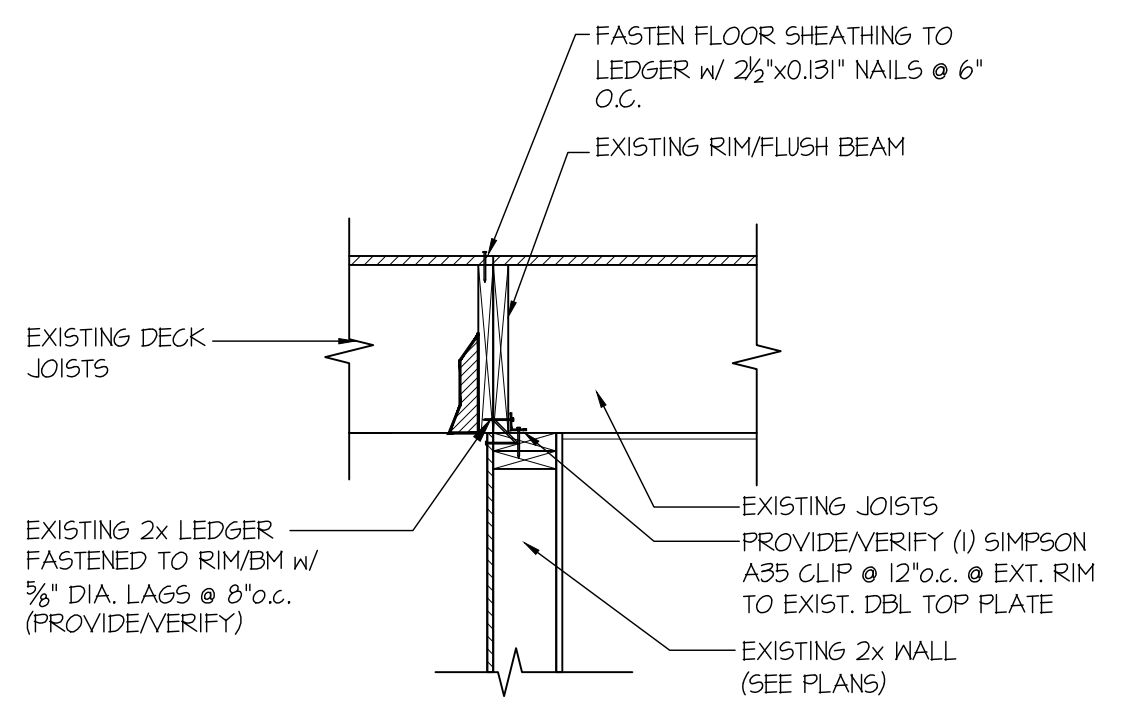
20 SHEAR TRANSFER DETAIL @ SHEARWALL ABOVE
SCALE: 3/4"=1'-0"



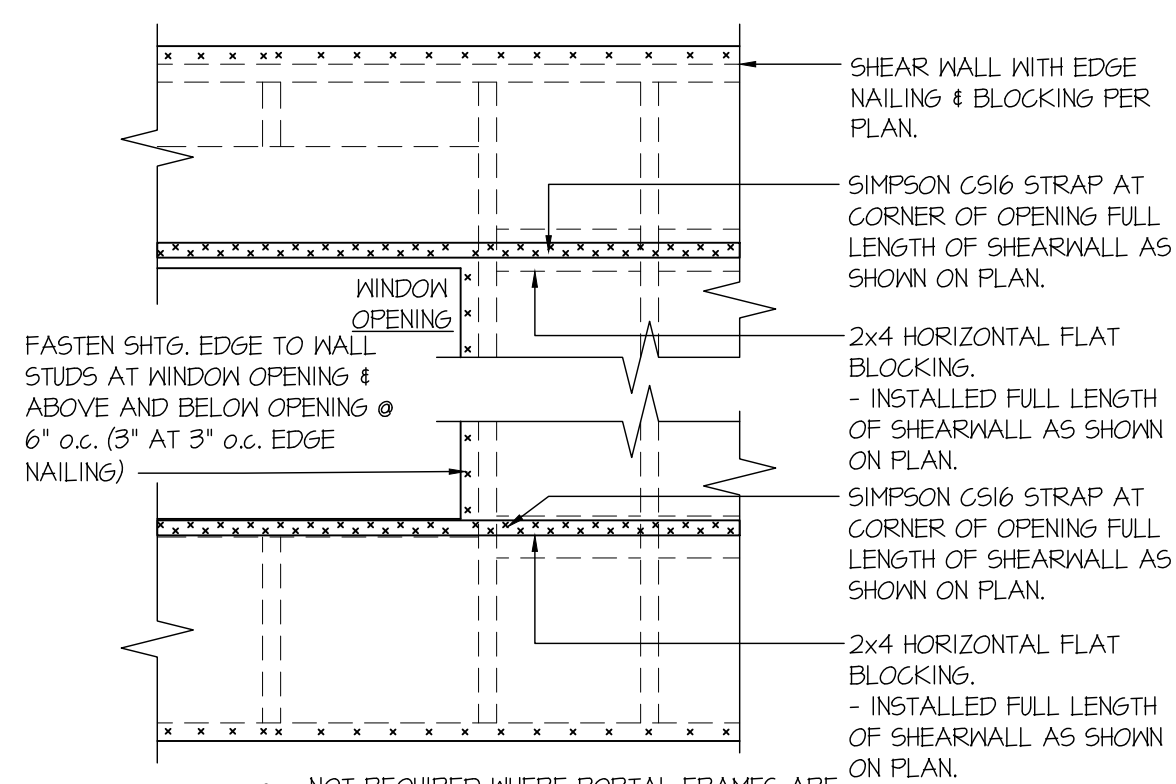
31 SHEAR TRANSFER DETAIL BETWEEN FLOORS @ EXT. WALL
SCALE: 3/4"=1'-0" PERPENDICULAR FRAMING



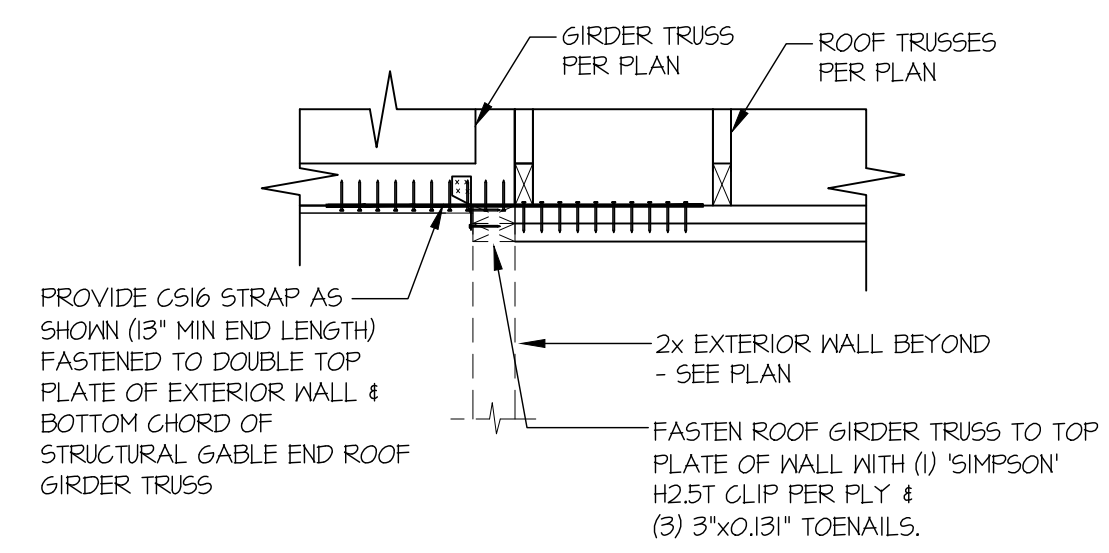
34 TYPICAL SHEAR TRANSFER DETAIL @ EXTERIOR WALL ABOVE FLUSH BEAM
SCALE: 3/4"=1'-0"



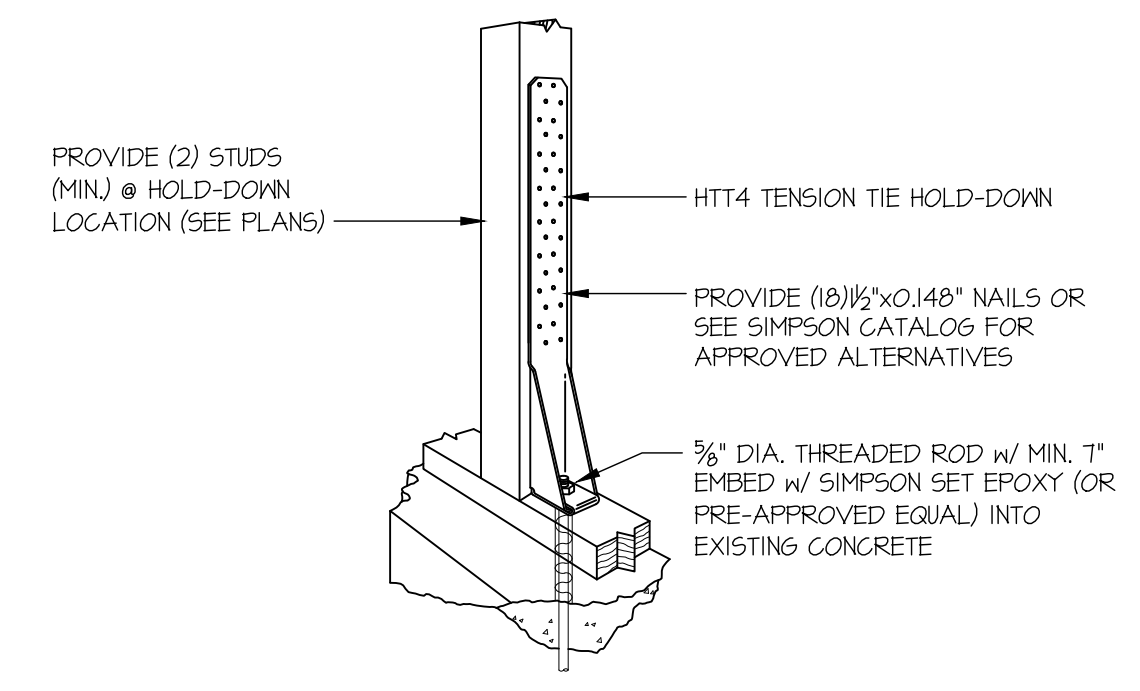
36 SHEAR TRANSFER DETAIL BETWEEN FLOORS
SCALE: 3/4"=1'-0" PERPENDICULAR FRAMING



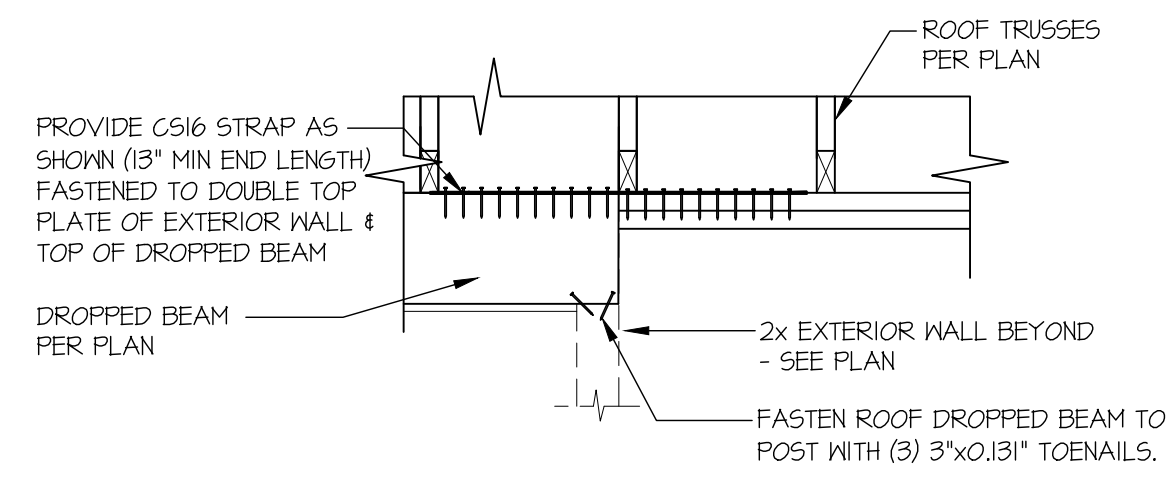
94 EXT. WALL & INT. SHEARWALL OPENING ELEVATION
SCALE: NTS



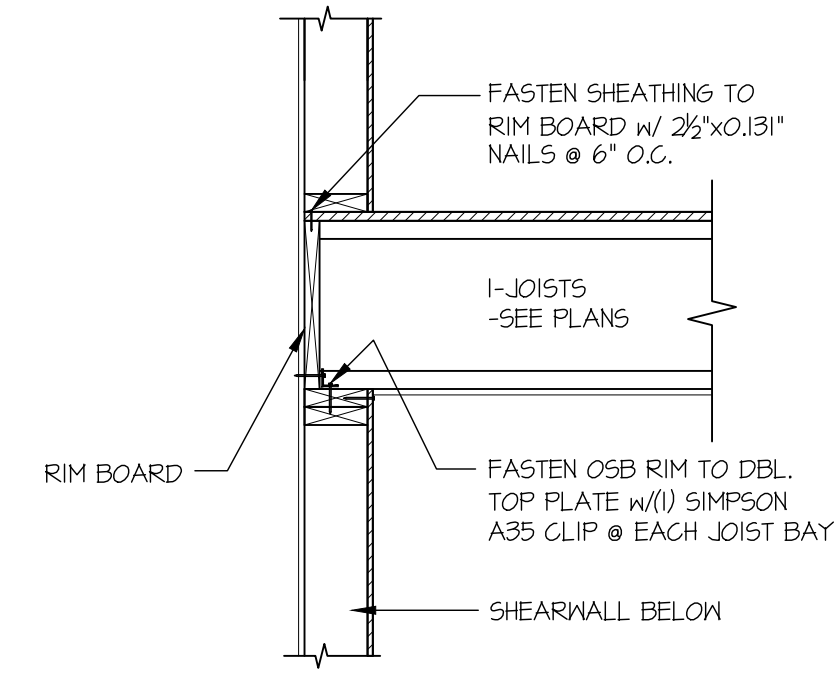
117 STRAP DETAIL
SCALE: 3/4"=1'-0"



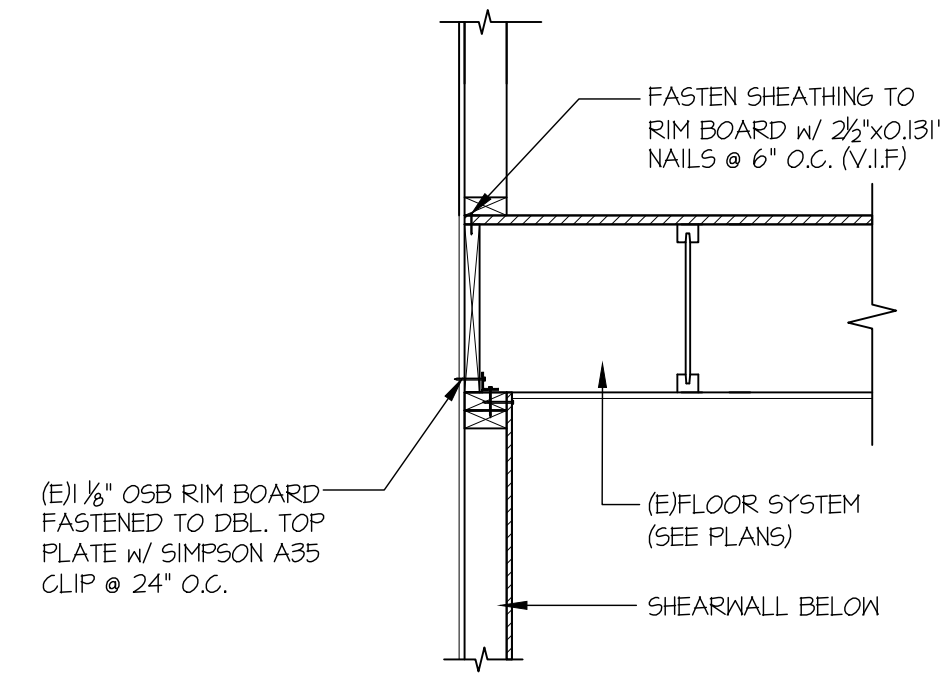
A TYPICAL HOLD-DOWN INSTALLATION
NOT TO SCALE SIMPSON HT4 SHOWN @ EXISTING CONC FND



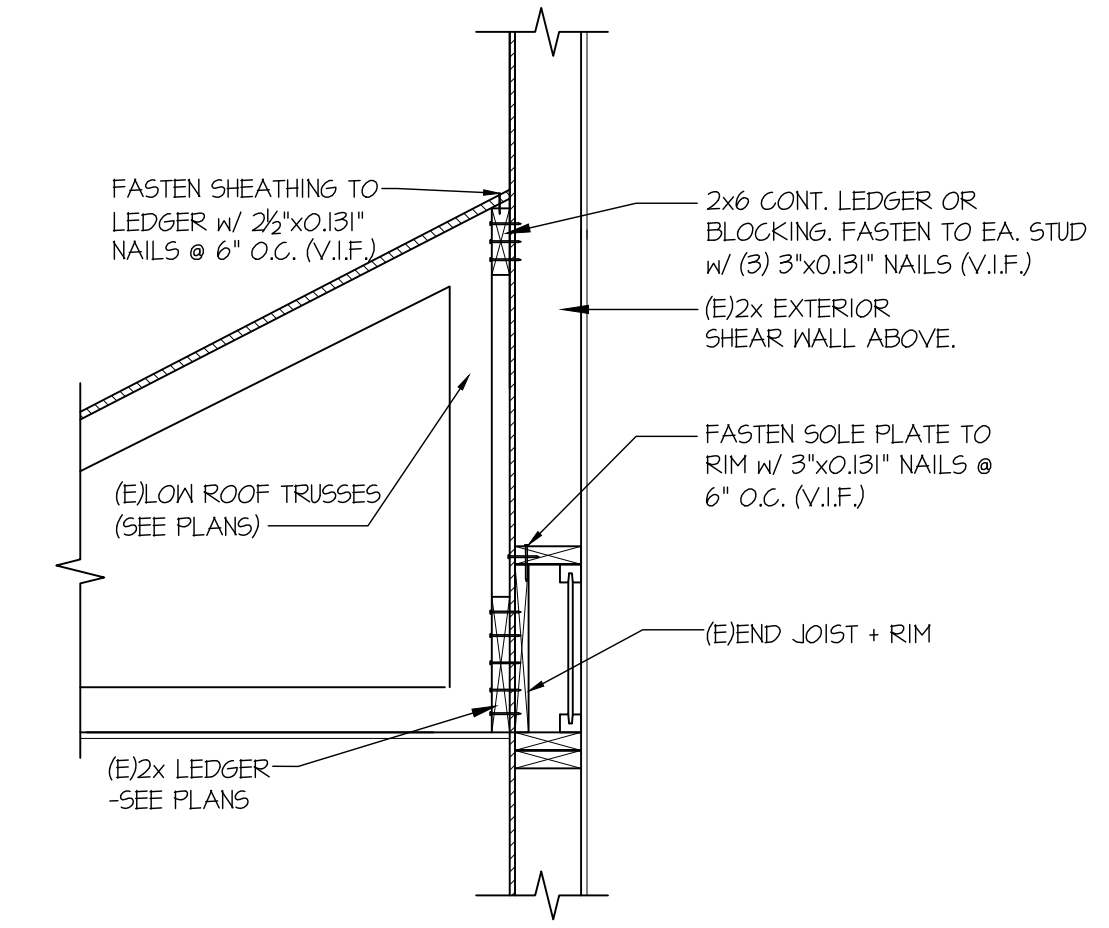
119 STRAP DETAIL
SCALE: 3/4"=1'-0"



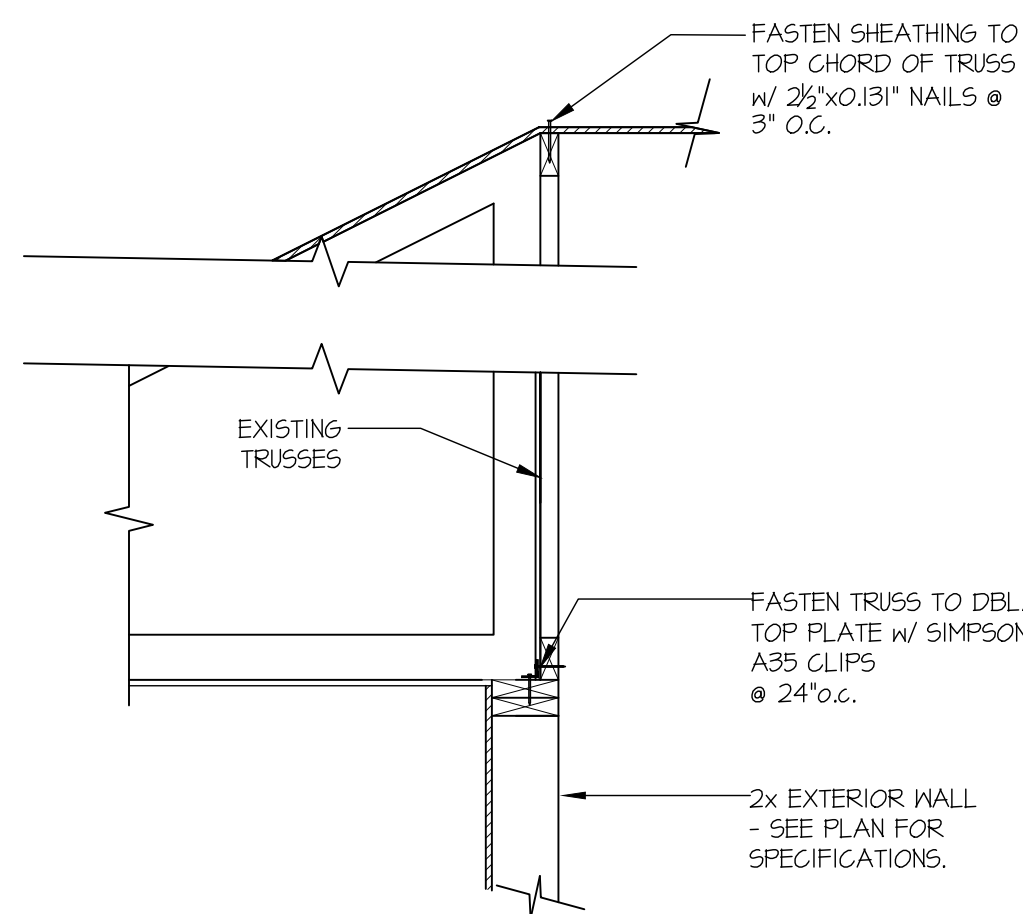
121 SHEAR TRANSFER DETAIL @ INTERIOR SHEAR WALL
SCALE: 3/4"=1'-0" EDGE OF FRAMING



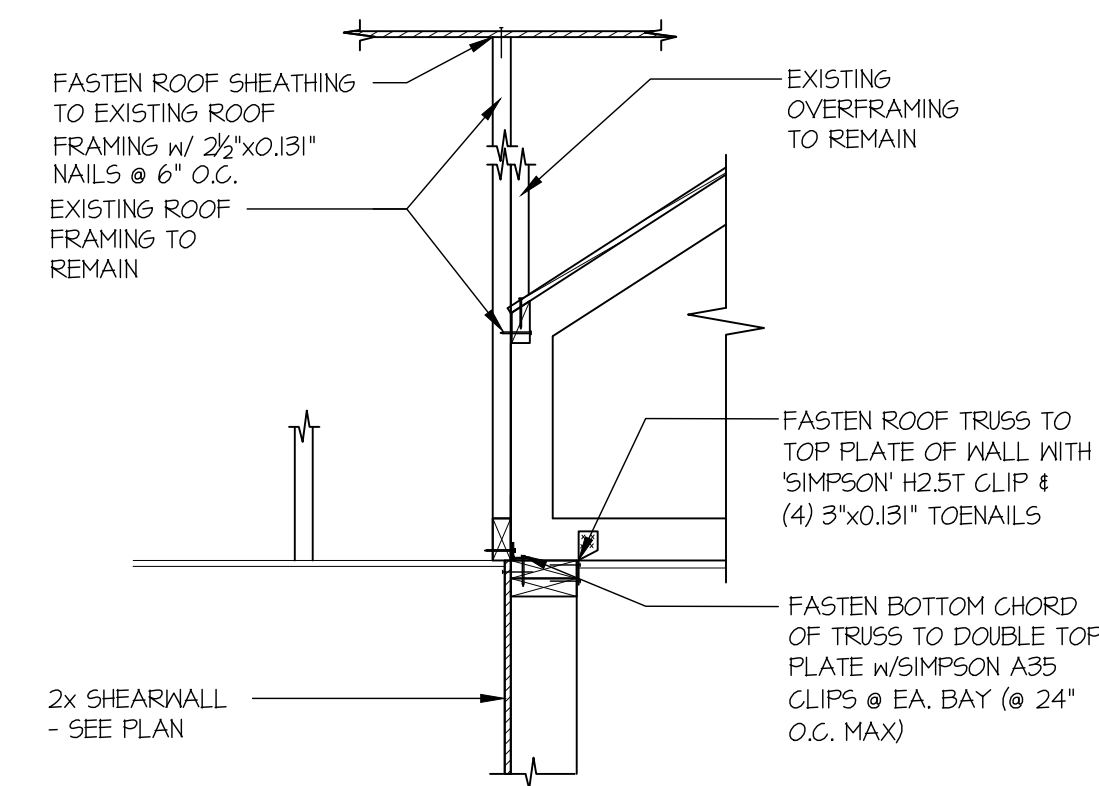
122 SHEAR TRANSFER DETAIL @ INTERIOR SHEAR WALL
SCALE: 3/4"=1'-0" EDGE OF FRAMING



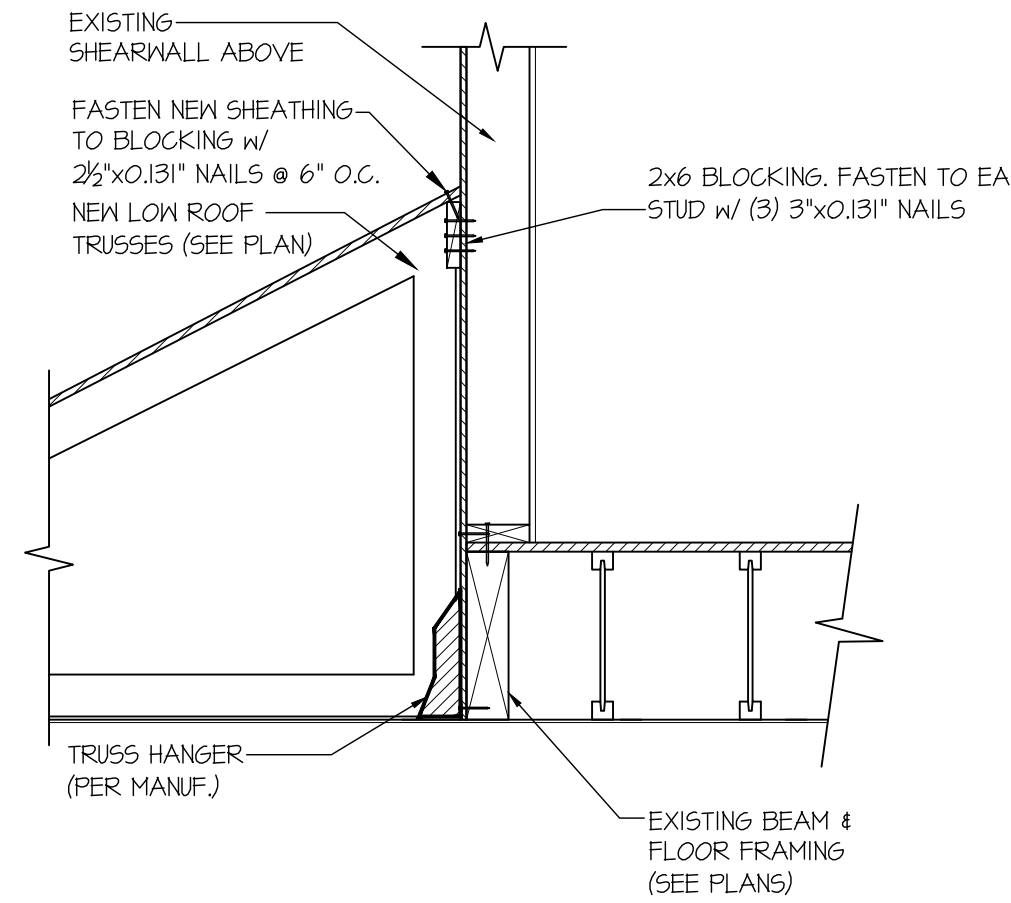
143 SECTION
SCALE: 3/4"=1'-0"



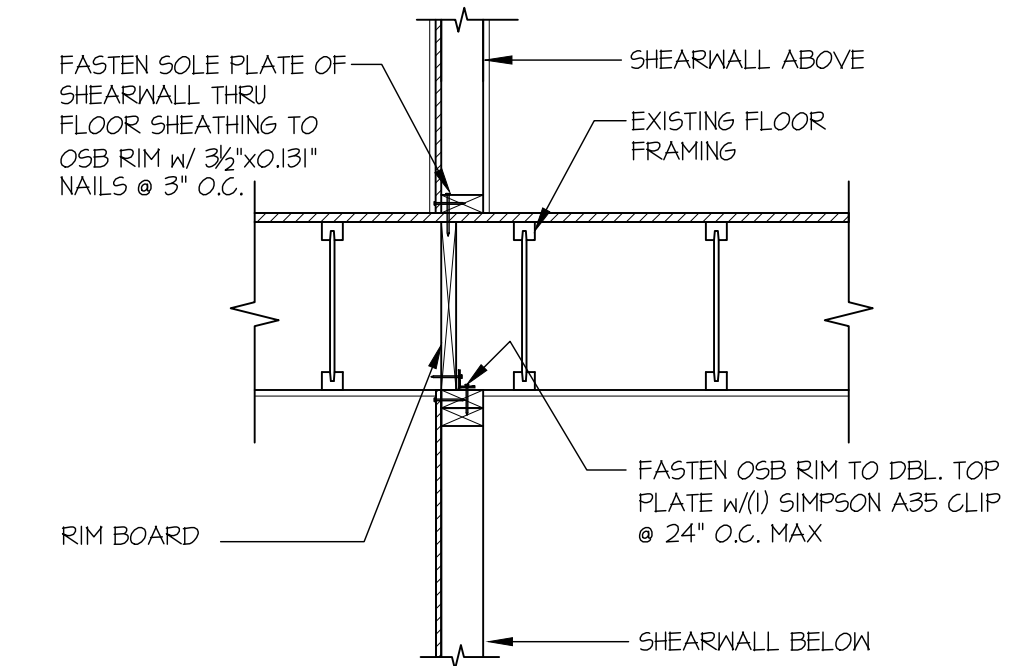
153 TRUSS @ HIP
SCALE: 3/4"=1'-0"



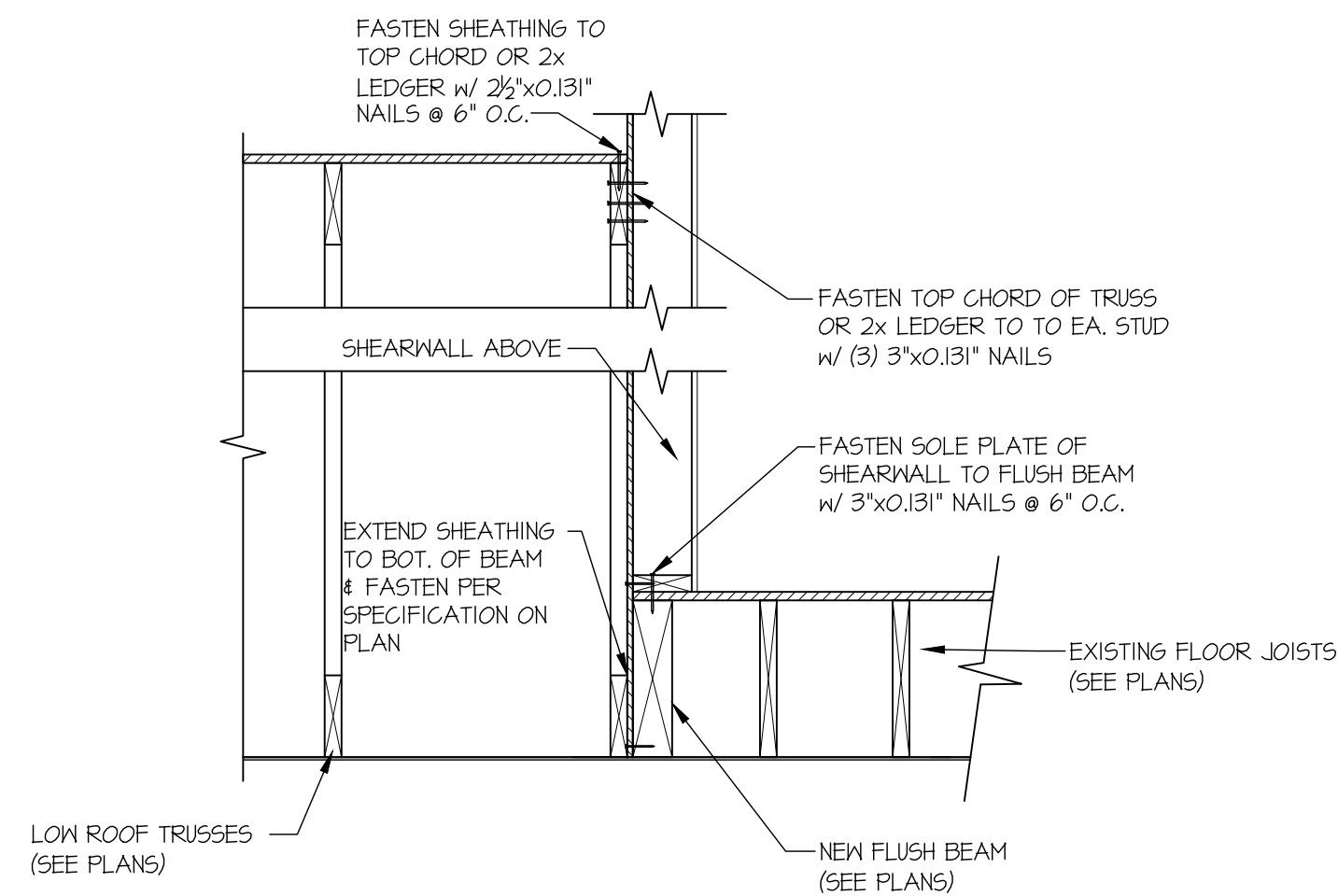
154 SHEAR TRANSFER DETAIL AT INTERIOR SHEARWALL BELOW
SCALE: 3/4"=1'-0"



158 SHEAR TRANSFER DETAIL @ EXTERIOR SHEARWALL ABOVE
SCALE: 3/4"=1'-0"



160 SHEAR TRANSFER DETAIL @ INT. SHEARWALL ABOVE & BELOW
SCALE: 3/4"=1'-0" PARALLEL FRAMING



170 SHEAR TRANSFER DETAIL @ EXTERIOR SHEARWALL ABOVE
SCALE: 3/4"=1'-0"



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| 06-08-21 | RJD |
| SCALE UPDATE | |

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